



PERFORMANCE QUALITY SAFETY

PQS devices catalogue

Pre-qualified equipment for the Expanded Programme on Immunization (EPI)



WHO Department of Immunization, Vaccines and Biologicals-Quality, Standards and Safety

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World Health
Organization

Preface

The PQS on-line catalogue includes details of all immunization-related products currently pre-qualified by WHO for procurement by United Nations agencies. The catalogue is produced and maintained by the Quality, Safety and Standards group in the Immunization, Vaccine and Biologicals Department of WHO, Geneva. It replaces the old WHO/UNICEF Product Information Sheets (PIS), the last edition of which was published in 2000. Only products included in the PQS catalogue are now recommended to be purchased by UN agencies.

PQS performance specifications and verification protocols have been phased in on a category-by-category basis since 2006. There are many new specifications and the old PIS specifications and test procedures have also been replaced. Once a PQS specification has been published, manufacturers are granted a transition period in which to meet the new standards. Whenever a new product is pre-qualified, a data sheet is published on the PQS website.

This document and the individual product data sheets are available on the internet only at:

<http://apps.who.int/immunization_standards/vaccine_quality/pqs_catalogue/index.aspx >

There is no hardcopy version. Each edition of the catalogue is date-stamped. It will be updated regularly to ensure that the information it contains is current.

A related catalogue of WHO pre-qualified vaccines will be made available on the internet later in 2011. This will be published and managed in a similar manner. Details will be provided in future catalogue revisions.

Navigation

The catalogue is divided by category as follows:

- E001: Cold rooms, freezer rooms and related equipment;
- E002: Transport (guideline only);
- E003: Refrigerators and freezers;
- E004: Insulated containers;
- E005: Ice-packs, cool-packs and warm-packs;
- E006: Temperature monitoring devices;
- E007: Cold chain accessories;
- E008: Single-use injection devices;
- E009: (not currently used);
- E010: Waste management equipment;
- E011: Specimen collection equipment;
- E012: (not currently used);
- E013: Therapeutic injection devices.

Coding

Each section includes details of currently pre-qualified products, a guideline on the choice of equipment in the category and links to relevant supporting documents.

Every product has a unique reference - the PQS product code. This comprises the category reference - e.g. E003 - followed by a number. Breaks in the numerical sequence will appear when an item is dropped from the catalogue. A unique reference is never reassigned to another product.

Feedback

User feedback is an essential component of PQS and the PQS website includes a feedback page. In particular we would like you to tell us how the products in the catalogue perform under field conditions. We will share this information with the manufacturers so that they can improve their products and we will also use it to develop better specifications.

Any general comments and queries can be addressed to: pqsinfo@who.int

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Glossary

The following definitions explain some key terms relevant to equipment specification. The list is not exhaustive: a term is only included where it is not common knowledge and where correct interpretation is essential in order to make an informed choice of equipment. Equipment purchasers are also encouraged to read the relevant PQS specifications and verification protocols.

Autonomy (solar refrigerators): The autonomy of a solar refrigerator measures the ability of the equipment to store vaccine during periods of heavy cloud. It is defined as the maximum number of days during which the refrigerator can continue to maintain a full vaccine load at a temperature between +2°C and +8°C when the photovoltaic panels are not generating electricity.

Cold life, cool life and warm life for cold boxes and vaccine carriers: Cold life applies when fully frozen water-packs are used as the coolant; these will continue to be used for transporting OPV and single antigen freeze-dried (lyophilized) vaccines. Cool life applies when cool water-packs are used and warm life applies when warm water-packs are used to protect freeze-sensitive vaccines in very cold climates.

- *Cold life with frozen water-packs:* Cold life is measured from the moment when the container lid is closed until the temperature of the warmest point in the vaccine storage compartment first reaches +10°C, at a constant ambient temperature of +43°C.
- *Cool life with cool water-packs at +5°C:* Cool life is measured from the moment when the container is closed, until the temperature of the warmest point inside the vaccine storage compartment first reaches +20°C, at a constant ambient temperature of +43°C.
- *Warm life with warm water-packs at +18°C:* Warm life is measured from the moment when the container is closed, until the temperature of the coldest point inside the vaccine storage compartment first reaches 0°C at a constant ambient temperature of -20°C.

EVM: Effective Vaccine Management initiative. This merges the EVSM and Vaccine Management Assessment (VMA) initiatives. The [EVM website](#) contains all the EVM resources.

EVSM: Effective Vaccine Store Management initiative. The EVSM assessment process has now been replaced by EVM. However, the EVSM Model Quality Plan is still relevant and is referred to in this document.

Holdover time: The time in hours during which all points in the vaccine compartment of a vaccine refrigerator remain below +10°C, at the maximum ambient temperature of the temperature zone for which the appliance is rated, after the power supply has been disconnected. For vaccine freezers, the holdover time is the time in hours during which the vaccine compartment remains below -5°C.

Primary store: A store which receives some or all of its vaccine directly from a national or international vaccine manufacturer.

Sub-national store: A store which receives vaccine from a primary store or a higher level sub-national store.

Water-pack: Flat plastic container, filled with water, which can be used as a frozen water-pack (ice-pack), a cool water-pack or a warm water-pack.

Water-pack freezing capacity (kg/24 hrs): The maximum weight of water-packs which can be fully frozen, in one batch, during a 24 hour freezing cycle. During this period the temperature of the vaccine storage compartment must remain within the acceptable temperature range of +2°C to +8°C.

Vaccine storage capacity: For a freezer, refrigerator, cold box or vaccine carrier: the actual volume available for the storage of vaccine as stated by the equipment manufacturer or established by physical measurement.

Abbreviations

The following symbols and abbreviations may occur in the section guidelines and in the product data sheets:

--	information not applicable or not available
()	performance data as reported by manufacturer
[]	estimated
++	not tested
<	less than or equal to
>	greater than or equal to
°C	degrees celsius (centigrade)
A	ampere
AC	alternating current
BCG	bacille Calmette-Guérin vaccine (for tuberculosis)
cc	cubic centimetre
CFC	chloro-fluoro-carbon
cm	centimetre
dB(A)	decibels
DC	direct current
DT	diphtheria and tetanus toxoid vaccine
DTP	diphtheria-tetanus-pertussis vaccine

g	grams
G	gauge
GWP	global warming potential (CO ₂ = 1.0)
H x W x L	height by width by length (or depth)
HC	hydrocarbon
HDPE	high density polyethylene
HepB	hepatitis B vaccine
HFC	hydro fluorocarbon
Hib	<i>Haemophilus influenzae</i> type b vaccine
HIP	high impact polystyrene
hrs.	hours
Hz	hertz (cycles per second)
id	internal diameter
IPV	inactivated polio vaccine
kg	kilograms
km	kilometre
kPa	kilo Pascals (100 kPa = 1 Bar = 14.5 psi)
kVA	kilovolt-ampere
kWh	kilowatt-hours
LDPE	low density polyethylene
LLDPE	linear low density polyethylene
LPG	liquid petroleum gas
LPM	litres per minute
lts or l	litres
m	metre
m ³	cubic metre
max	maximum
min	minimum
ml	millilitre
mm	millimetre
MMR	measles-mumps-rubella vaccine
MR	measles-rubella vaccine
No.	number
od	outer diameter
ODP	ozone depletion potential
OPV	oral polio vaccine
PoA	price on application
psi	pounds per square inch
PVC	polyvinyl chloride plastic
PW	peak watt
RH	relative humidity

RPM	revolutions per minute
TT	tetanus toxoid vaccine
V	volt
VAC	voltage alternating current
VDC	voltage direct current
W	watt
YF	yellow fever vaccine

Product pre-qualification under PQS

PQS performance specifications and verification protocols can be downloaded from the PQS website.

Every item listed in the catalogue has been shown to comply with the relevant PQS performance specification, and has been independently assessed against the companion verification protocols. There are three types of verification:

Type-examination: Some products such as cold rooms and solar power systems are site-specific but are made up of standard manufactured components. These are pre-qualified by a 'type-examination' procedure. A technical expert carries out a detailed assessment against a standard checklist to determine that all the components comply fully with the specification. Type-examination is also used for certain other product types which meet normal industry standards, and are not considered to be programme-critical; for example, temperature data loggers used for temperature monitoring studies.

Type-testing: A product that is programme-critical is generally 'type-tested'. Type-testing also starts with a 'type-examination' procedure. This is followed by standardized laboratory testing to ensure full compliance with the critical performance requirements.

Full Quality Assurance: A few products (for example – cold rooms, solar power systems and event logger type temperature monitoring systems) require quality-assured on-site installation and commissioning if they are to operate successfully. An additional type of verification protocol known as a Quality Assurance (QA) protocol applies to such equipment. A QA protocol is installation-specific and is intended to form part of the contractual agreement with the equipment supplier/installer. QA protocols can be downloaded from the PQS website in Microsoft Word format. This allows purchasers of such equipment to complete the document to suit their own specific needs.

Annual review procedure: Following initial pre-qualification, all listed products must pass an annual review. This process will take account of feedback from purchasing agencies and users. Adverse reports may lead to product modifications, to suspension or, in serious cases, to removal from the catalogue.

How to order products

When you order a product, whether from a UN procurement agency or direct from the manufacturer, you should:

- Give the full PQS product code.
- Give the manufacturer's product code as shown on the product data sheet.
- If product options are available, including spare parts, clearly state the ones that are required.

Guide prices: Where prices are given, they are shown in US dollars and are generally given as indicative Ex-Works (EXW) prices. Where possible these guide

prices will be updated annually; however, before purchasing, you will need to obtain a firm quotation, either from a UN procurement agency, or by direct negotiation with the manufacturer.

Shipping: Shipping costs vary considerably according to destination and are not included within the guide prices. Purchasers should always confirm freight charges with the supplier before placing an order. Estimated freight charges should be included in budgets, and shipping lead times should be included in project plans.

Incoterms: Manufacturers and suppliers offer delivery arrangements based on international standard definitions known as *Incoterms*. As noted above, guide prices in the PQS catalogue are generally quoted EXW. The two tables show who pays the cost of each service item in the delivery chain. A new edition of Incoterms was published in 2010 and is being phased in. Those below refer to the long-established 2000 edition. It is essential to check which version is being used by the supplier.

Incoterms definitions

TERM SERVICE	EXW Ex-Works	FCA Free Carrier	FAS Free Alongside Ship	FOB Free On-Board Vessel	CFR Cost & Freight	CIF Cost Insurance & Freight	CPT Carriage Paid To
	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays
Warehouse storage at point of origin	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Warehouse labour at point of origin	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Export packing	Seller	Seller	Seller	Seller	Seller	Seller	Seller
Loading at point of origin	Buyer	Seller	Seller	Seller	Seller	Seller	Seller
Inland freight	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller
Port receiving charges	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller
Forwarders fee	Buyer	Buyer	Seller	Seller	Seller	Seller	Seller
Loading on ocean carrier	Buyer	Buyer	Buyer	Seller	Seller	Seller	Seller
Ocean/Air freight charges	Buyer	Buyer	Buyer	Buyer	Seller	Seller	Seller
Charges at foreign Port/Airport	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Seller
Customs, Duties & Taxes abroad	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer
Delivery charges to final destination	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer	Buyer

TERM SERVICE	CIP Carriage & Insurance Paid To	DAF Delivery At Frontier	DES Delivered Ex-Ship	DEQ Delivered Ex-Quay, Duty Unpaid	DDU Delivered Duty Unpaid	DDP Delivered Duty Paid
	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays	Who Pays
Warehouse storage at point of origin	Seller	Seller	Seller	Seller	Seller	Seller
Warehouse labour at point of origin	Seller	Seller	Seller	Seller	Seller	Seller
Export packing	Seller	Seller	Seller	Seller	Seller	Seller
Loading at point of origin	Seller	Seller	Seller	Seller	Seller	Seller
Inland freight	Seller	Seller	Seller	Seller	Seller	Seller
Port receiving charges	Seller	Seller	Seller	Seller	Seller	Seller
Forwarders fee	Seller	Seller	Seller	Seller	Seller	Seller
Loading on ocean carrier	Seller	Seller	Seller	Seller	Seller	Seller
Ocean/Air freight charges	Seller	Seller	Seller	Seller	Seller	Seller
Charges at foreign Port/Airport	Seller	Seller	Buyer	Seller	Seller	Seller
Customs, Duties & Taxes abroad	Buyer	Buyer	Buyer	Buyer	Buyer	Seller
Delivery charges to final destination	Buyer	Buyer	Buyer	Buyer	Seller	Seller

Source: <http://www.skymartworldwide.com/incoterms-2009.html>

The official Incoterm definitions can be purchased from the [International Chamber of Commerce](#) website.

Where to order products

Orders can be placed directly with the manufacturer at the address given on the product data sheet.

Most items can also be purchased through the [WHO Contracting and Procurement Service](#) or from [UNICEF Supply Division](#) in Copenhagen, Denmark.

Vehicles, motorbikes and power products can be purchased through the Inter-Agency Procurement Services Office ([UNDP/IAPSO](#)). UNICEF-SD also supplies vehicles.

Other equipment suppliers include: [International Dispensary Association](#) (IDA) in The Netherlands and [Médecins Sans Frontières Logistique](#) (MSFL) in France.

Authorization is needed to gain full access to most of these websites.

General information

Vaccine storage and distribution

The following table shows the current WHO guidance on vaccine storage temperatures. Use these recommendations when calculating refrigeration needs.

WHO vaccine storage recommendations

Vaccine	Primary	Sub-national		Health Facility	Health Post			
		Province	District					
	Maximum storage period			Maximum storage period				
	6-12 months	3 months	1 month	1 month	According to session plan			
OPV	Store at -15°C to -25°C OPV is the only vaccine that can safely be frozen and unfrozen repeatedly		Store at +2°C to +8°C					
BCG	Store these lyophilized vaccines at +2°C to +8°C. Under exceptional circumstances they can be temporarily stored at -15°C to -25°C (e.g. if there is a temporary shortage of storage space. Never freeze diluent.		Store at +2°C to +8°C					
Hib lyophilized								
JE								
Measles								
Meningitis								
MMR								
MR								
Yellow Fever								
Cholera								
DT/TT/Td								
DTP								
DTP-HepB								
DTP-HepB+Hib lyo								
DTP-HepB-Hib liquid								
DTP-Hib								
Hepatitis B								
Hib liquid								
HPV								
Influenza								
IPV								
Pneumococcal								
Rabies								
Rotavirus								
Diluent: If diluent is included in the vaccine packaging, store it between +2°C and +8°C. However, if diluent is supplied separately, it can be stored outside the cold chain but must be cooled before use, preferably for a day or for a period of time sufficient to ensure that the vaccine and diluent are both at temperatures between +2°C and +8°C when they are reconstituted. Never freeze diluent.								
Note that diluent/adjuvant for some pandemic influenza vaccines must be stored in the cold chain.								

Vaccine distribution guidelines

Frozen water-packs

WHO recommends that OPV and the single antigen freeze-dried (lyophilized) vaccines should be distributed in cold boxes or vaccine carriers, lined with frozen icepacks.

Conditioned ice-packs

Field studies continue to show that vaccine freezing during transport remains one of the principal causes of damage to freeze-sensitive liquid vaccines in the cold chain. The use of 'conditioned' ice-packs has previously been recommended as the way to avoid this risk; however ice-pack conditioning is a time-consuming process and recent cold chain surveys have shown that the practice is difficult to enforce and is widely ignored. Note that the use of cardboard, newspaper or similar material to isolate freeze-sensitive vaccines from fully frozen ice-packs is completely ineffective as a means for preventing vaccine freezing.

Cool water-packs

The only way to eliminate the freezing risk entirely is to transport liquid vaccines, other than OPV, in cold boxes lined with cool water-packs which have been pre-cooled in a refrigerator to a temperature of +2°C to +8°C. Where it is essential to transport OPV, liquid and freeze-dried vaccines in a single carrier, experiments have shown that cool water-packs may safely be used provided the cool life of the carrier is not exceeded. For current guidance on the performance and use of cool water-packs refer to Kartoglu U, Ganivet S, Guichard S, Aiyer V, Bollens P, Maire D, Altay B. *Use of cool water-packs to prevent freezing during vaccine transportation at the country level*. PDA Journal of Pharmaceutical Science and Technology, Vol. 63, No. 1, January–February 2009, 11-26.

Changing over to the use of cool water-packs involves significant changes in practice. In addition there are equipment implications because additional refrigerators will be needed at primary and sub-national level to cool the water-packs in bulk. Consequently it is strongly recommended that the introduction of this method should be preceded by a formal cold chain study based on [WHO/IVB/05.01](#): *WHO Study Protocol for Temperature Monitoring in the Vaccine Cold Chain*. The study design should aim to establish the extent of current problems and also the logistical and financial implications of the changeover to the use of cool water-packs.

Warm water-packs

Field experience in cold climates has shown that it is necessary to protect freeze-sensitive vaccines from exposure to ambient temperatures below 0°C during transport. Unfrozen ice packs, stabilized at a room temperature between 10°C to 24°C, can be used for the transport of freeze-sensitive vaccines for a period not exceeding 8 hours. These vaccines are generally very heat stable and the short time (typically less than 8 hours) that they are subjected to these temperatures will not harm them. For fuller guidance refer to Figure 1.5.4.A of [WHO/IVB/04.18](#). *EVSM Module 2: Model Quality Plan*.

Vaccine vial monitors (VVMs)

The majority of vaccines used in EPI are now supplied with VVMs. Guidance on their use can be found in the document [WHO/V&B/02.35](#) *Getting started with vaccine vial monitors*. Since this was written, VVMs have been shown to be a powerful tool for

managing the use of vaccines generally, and for preventing wastage in routine, outreach and campaign settings. In addition, many studies have shown that VVMs can enable the more heat-stable vaccines to be used safely beyond the cold chain.

Refrigerants and foaming agents

Concerns over depletion of the stratospheric ozone layer have led to a global effort to phase out the production and consumption of chlorofluorocarbons (CFCs).

Subsequent concerns over global warming have reinforced the need to remove eliminate these substances because they are also potent greenhouse gases.

Until 1995, the CFCs, R11 and R12, were commonly used as refrigerant gases in compression refrigeration circuits and as foaming agents for the insulation of refrigerators and insulated containers (cold boxes and vaccines carriers).

Under the terms of the [Montreal Protocol](#), the international community has committed itself to the elimination of these gases. The Protocol called for the cessation of CFC consumption as of 1st January 1996 in industrialized nations and from 1st January 2010 in developing nations.

Refrigerants

R12 is commonly replaced with HFC 134a. An increasing number of manufacturers are now using the hydrocarbon R600 (isobutene). Cold room and freezer room manufactures may use a variety of other refrigerants. Until 2010, developing country manufacturers were still allowed to use CFC refrigerants, but many of them had already made the change to more environmentally-benign gases.

In PQS performance specifications permit the use of HFC (hydrofluorocarbon) or HC (hydrocarbon) refrigerants in refrigerators and freezers. This is a change from the situation which applied under PIS, which did not allow the use of hydrocarbons. Hydrocarbons are still not permitted for cold rooms and freezer rooms

The table below gives the Ozone Depletion Potential (ODP) and Global Warming Potential (GWP) figures for the gases described above, and in the next section. Equipment which uses cyclopentane foamed insulation and R600 refrigerant is currently the best environmental choice.

ODP and GWP figures for some key gases

Gas	Use	Ozone Depletion Potential (ODP)	Global Warming potential (GWP) ^a
R11	Refrigerant & foaming agent	1.0	4,680 ¹
R12	Refrigerant & foaming agent	1.0	10,720 ²
R134a	Refrigerant	0.25	1,410 ³
R600	Refrigerant	0.0	204
Cyclopentane	Foaming agent	0.0	11
R141b	Foaming agent (HCFC)	0.11	700

a. The GWP for CO₂ = 1.0

¹ Source: Inter-governmental Panel on Climate Change (IPCC)

² Source: IPCC

³ Source: IPCC

Foaming agents

R11 is no longer used as a foaming agent by any of the industrialized country manufacturers listed in the PQS catalogue. It is now replaced by cyclopentane in European countries and by R141b in the USA (the use of R141b was banned in Europe as of 1st January 2004 and it will eventually be phased out worldwide in 2030). Because R141b has a much higher Global Warming Potential (GWP) than cyclopentane; the latter is less damaging to the environment when it is released into the atmosphere. Other gases are under investigation as replacements for R141b, including HPC-245fa, HFC-365mfc, HFC-234a, isopentane and n-pentane and various blends.

Managing existing equipment containing CFCs

CFCs have now been phased out worldwide. For this reason, programme managers should ensure that remaining CFC equipment is responsibly managed:

1. Check that tools for the repair of CFC equipment is locally available and that cold chain technicians are trained.
2. Keep an inventory of CFC equipment and where it is installed.
3. Make sure that CFC equipment is decommissioned in a responsible manner at the end of its service life and that the refrigerant is recovered and destroyed.

E001

Cold rooms, freezer rooms and related equipment

All the equipment included in the E001 category is manufactured for a specific application. It then has to be assembled and commissioned on site by a competent installer. The end user must specify clearly what is required, must select or build the space where the equipment will be housed and must provide the necessary electrical power supply, wiring and other services to which the equipment will be connected by the installer.

E001.1 Cold rooms and freezer rooms

A building housing a cold room needs to be accessible to delivery vehicles and in good condition. It must have suitable finishes, adequate ventilation, and the correct electricity supply.

The steps involved in buying and commissioning a cold room are summarised below, together with links to the relevant reference documents.

1. *Establish net vaccine capacity:* It is essential to calculate accurately the net vaccine capacity of the cold room(s) and freezer room(s), taking account of future vaccine introductions. WHO tools are available to help establish the required capacity of the store. DO NOT order on the basis of gross capacity – for example a 40 m³ room – without verifying usable net capacity with the supplier.
2. *Decide location:* Select the spaces(s) in which the equipment is to be installed. [WHO/V&B/02.34: Guideline for establishing or improving primary and intermediate vaccine stores](#) provides guidance on building selection and preparation.
3. *Shortlist suppliers:* UNICEF Supply Division has long-term purchase agreements with PQS pre-qualified cold room companies. If the room is not being purchased through UNICEF, prepare a tender long list. This should preferably include the pre-qualified companies listed in the PQS catalogue. Establish which companies on the long list are able to provide, install, commission and service cold rooms and freezer rooms at the chosen site. Based on this information, make a short list. Every company on the short list should have a satisfactory arrangement with a competent installation contractor in the country where the equipment is to be installed and must be able to provide a long-term maintenance service.

4. *Prepare and invite tenders:* Prepare tender documentation using the PQS specification E001/CR/FR-01 and verification protocol E001/CR/FR-VP02 templates and invite tenders. If required, invite tenders for a standby generator and voltage stabilizer at the same time. Specific guidance on specifying and buying generators is given in section E01.2. Guidance on heavy duty voltage stabilizers is given in E01.3.
5. *Place order:* Receive and evaluate tenders, agree an installation programme, and place an order with the winning supplier.
6. *Prepare the site:* Prepare the space for the cold room in accordance with the supplier's requirements and the guidance link in point 2 above
7. *Supervise:* Supervise the installation and oversee commissioning and user training.
8. *Monitor:* Check the performance of the equipment in use and monitor the effectiveness of the maintenance agreement.
9. *Maintain:* Ensure that the maintenance agreement is renewed after the expiry of the initial contract. Ensure that the temperature monitoring equipment is re-calibrated annually. Refer to the [WHO/IVB/04.16-20: WHO-UNICEF Effective Vaccine Store Management Initiative](#), to [WHO/V&B/02.31: User's handbook for vaccine cold rooms and freezer rooms](#) and to [WHO/V&B/02.30: How to look after a cold room or freezer room: self-assessment tool](#).

E001.2 Standby generators

WHO and UNICEF now recommend that all primary vaccine stores should be fitted with a standby generator with automatic start up, regardless of the reliability of the mains power supply – see [WHO/IVB/04.16-20: WHO-UNICEF Effective Vaccine Store Management Initiative](#). In addition, consider installing standby generators in the following situations:

- At large intermediate vaccine stores, equipped with cold rooms.
- At other sub-national stores where the mains power supply is sufficiently unreliable to compromise the performance of ice-lined refrigerators, even when they are fitted with voltage stabilizers.

In all other situations, if power cuts are a chronic problem, review alternative solutions such as ice-lined appliances fitted with voltage stabilizers, photovoltaic equipment, or equipment which runs on kerosene or bottled gas. The decision to purchase a standby generator should not be taken lightly since it involves an investment of several thousand dollars, together with significant maintenance and training costs.

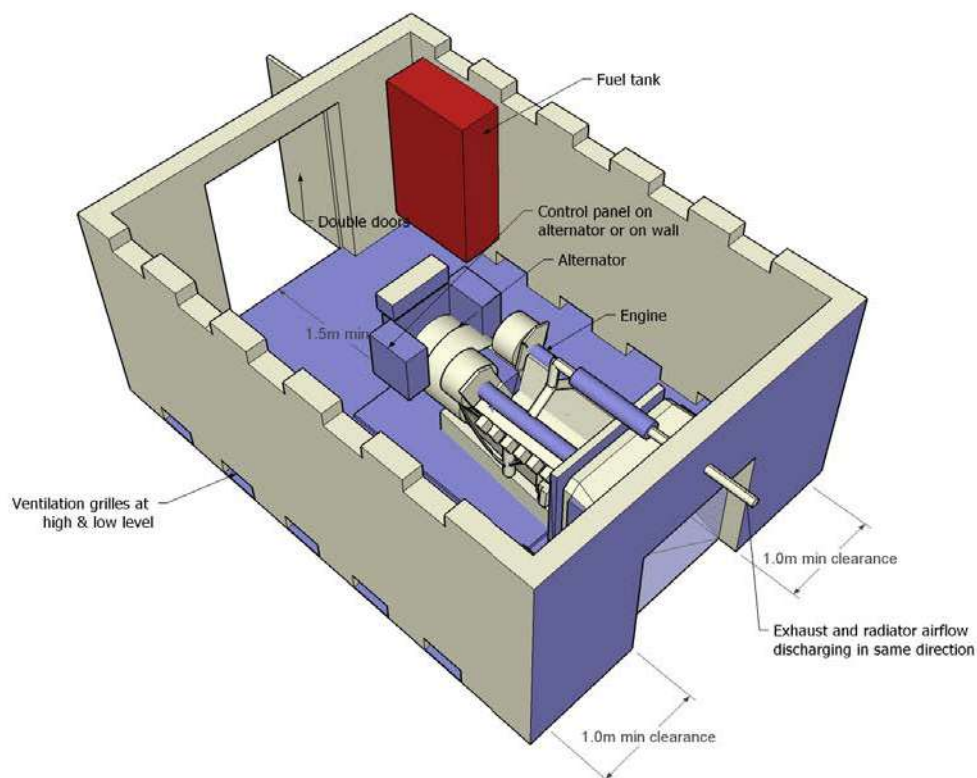
E001.2.1 Specifying the generator

The guidance notes in this section are for background information only. They are intended to be used to brief a professional engineer and/or to communicate with system suppliers and installers. Wherever possible, the generator should be supplied by the cold room/freezer room manufacturer as part of a comprehensive package - see E001.1. In all other cases, seek the advice of a qualified electrical engineer. In situations where an engineer is not available, refer to a reliable technical source such

as *Engineering in Emergencies – A practical guide for relief worker*, available in hardcopy or CD format from [RedR](#)¹

The generator house: The size of a standby generator is determined by the rated load of the equipment to which it is connected. The figure below shows the layout of a typical generator house.

A typical generator house



Adapted from *Engineering in emergencies*

The generator house should have a concrete floor slab. Provide ventilation openings near the bottom of the walls to provide cooling air, with additional openings in the wall nearest the air filter to supply cool air for combustion. In addition, provide ventilation openings along the top of the walls to release accumulated hot air. All ventilation openings should be fitted with mesh grilles to keep out pests. Arrange the exhaust pipe above the cooling air outlet to discharge in the same direction. Keep the exhaust system as short as possible, with the minimum number of bends.

Fuel tanks should ideally be 'bunded'. A bunded tank consists of a tank mounted inside an outer housing large enough to accommodate the total contents of the tank, should it develop a leak. This ensures that fuel spills are contained and cannot get into the drainage system or the ground water.

E001.2.2 *Inviting tenders for a generator*

Prepare a tender short list. Every company on the short list must have a satisfactory arrangement with a competent installation contractor in the country where the

¹ The information which follows in this section is partly based upon Section 14.3.3 of *Engineering in Emergencies – A practical guide for relief workers*, 1st Edition, Intermediate Technology Publications, 2001.

equipment is to be installed and should be able to provide a long-term maintenance service or training for local technicians.

Tender invitations should include the following information:

1. *Client*: Name of the client.
2. *Location*: Site location.
3. *Delivery/installation date*: Specify the required date for delivery/installation.
4. *Payment arrangements*: Specify currency, payment stages, etc.
5. *Information to be supplied by tenderers*: Price (Incoterm). Full technical details of the proposed equipment including fuel consumption on full load (fuel consumption will be a significant factor in choosing a generator set if anticipated run-times are long – less significant if the generator will be used infrequently). Details of the manufacturer's in-country installation and service network. Manufacturer's infrastructure requirements (e.g. cable connections, etc.). Manufacturer's detailed recommendations for the generator house layout, construction and ventilation.
6. *The supply required*: **Either**: Single phase, 2-wire (phase and neutral), and system voltage, for example 110V, 220V or 240V. **Or**: Three-phase, 4-wire (three-phase and neutral), and system voltage, for example: 380/220V or 415/240V.
7. *Supply frequency*: 50 Hz or 60 Hz.
8. *Connected equipment*: A schedule listing every item of connected equipment, including cold rooms, freezer rooms, refrigerators and freezers. In addition, list all other equipment for which standby power is required, such as computers, printers, and electric lighting. For each item on the list, give the power requirement in kW. In the case of motors (e.g. cold room compressors), give the method of starting, e.g. direct-on-line (DOL). If you cannot find this information, give full details of each item of equipment, including manufacturer and model number, and request the tenderer to obtain the missing data.
9. *Site conditions*: Ambient temperature, humidity and altitude affect generator performance. Give the annual maximum and minimum temperature at the site in degrees centigrade, the maximum and minimum relative humidity in percent and the altitude of the site above sea level in metres.
10. *Mounting method*: Skid mounted. Mobile units are available, but are not appropriate for a fixed installation.
11. *Weather protection*: State whether the generator should be supplied as an open or weather-protected set. Open sets will be housed in a generator house. Weather-protected sets may be mounted outdoors.
12. *Soundproofing*: Soundproofed housings are usually expensive. A locally made masonry enclosure is often cheaper and, in the case of units installed outside, they also provide protection against the weather – see figure above.
13. *Fuel*: Diesel is universal on all but the smallest portable generators. Natural gas might be required in areas with stringent air pollution regulations.
14. *Engine start*: If automatic mains-failure start and/or shut down are needed, this must be clearly stated. Otherwise specify hand and/or electric start, complete with battery (even with electric start, it is useful to have a hand-start facility when the battery is flat or missing).

15. *Engine monitoring facilities:* Over-heating, low oil pressure, battery charging ammeter or indicator. Automatic engine shut-down in the event of over-heating, low oil pressure or broken fan belt. Engine monitoring meters and indicators may be mounted on the control panel – see next item.
16. *Control panel:* Integrated (set-mounted) or free-standing control panel. Integrated control panels must be mounted on anti-vibration mountings. Instrumentation to include: One ammeter per phase. One voltmeter and selector switch (to monitor each phase-phase and phase-neutral voltage). Frequency meter. Hours-run meter.
17. *Fuel tank capacity:* Sufficient to allow a minimum of 72 hours continuous running. Specify that it should be banded.
18. *Exhaust pipework:* Run length and bends needed to ensure discharge in a safe location.
19. *Spare parts:* **Either:** ensure that the supplier has an effective service network in-country. **Or:** order an adequate supply of spare parts and consumables, sufficient for a minimum of two year's normal operation, as recommended by the set manufacturer.
20. *Installation:* Specify whether the equipment is to be installed and commissioned by the manufacturer's in-country agent (strongly recommended), or by others.
21. *Training:* The manufacturer, or installer, must train vaccine store staff and maintenance technicians in the use of the equipment and must provide comprehensive operating and service manuals in the appropriate language.
22. *Maintenance agreement:* Wherever possible, arrange for the equipment to be maintained by the set manufacturer's in-country service agent. The tender documents should clearly specify the length of the maintenance agreement, the minimum requirements for routine maintenance and the maximum acceptable response time in the event of an emergency – e.g. equipment failure during a power outage.

E001.2.3 Choosing a supplier

The lowest bidder is not always the cheapest when lifetime operating costs are considered. Significant factors which reduce operating costs include:

Local availability of technical expertise and spare parts: Tenderers without a local service network should generally be excluded.

Fuel consumption: A model with low fuel consumption may be cheaper to operate over its whole working life than a model with higher fuel consumption but a lower purchase price.

Revolutions per minute (RPM): Slow running generators with ratings below 1,800 RPM have longer working lives. Models running at 3,000 to 3,600 RPM are found to require more maintenance, have greater fuel consumption and a higher rate of mechanical wear. A cheap high RPM model may be a poorer choice than a more expensive low RPM model.

E001.2.4 Suppliers of standby generators

Inclusion in the following list does not imply any recommendation by the World Health Organization.

The Americas Cummins Power Generation 1400 73 rd Avenue. NE Fridley, MN 55432 USA Tel: +1 763 574 5000 Fax: +1 763 574 5282 Email: ask.powergen@cummins.com Web: http://www.cumminsonan.com	Lister Petter Ltd. Long Street, Dursley Gloucestershire GL11 4HS United Kingdom Tel: +44 (0)1453 544 141 Fax: +44 (0)1453 546 732 Email: sales@lister-petter.co.uk Web: webmaster@lister-petter.co.uk
Europe GENELEC SA Z.I. Nord Aranas 62, Rue du Nizerand 69400 Villefranche s/Saone France Tel: +33 (4) 74 62 65 05 Fax: +33 (4) 74 09 07 28 Email: genelec@genelec.tm.fr Web: www.genelec.tm.fr	FG Wilson Ltd. 1 Millennium Way Springvale Business Park Belfast Co. Antrim Northern Ireland BT12 7AL Tel: +44 (0) 28 9049 5000 Fax: +44 (0) 28 2826 1111 Web: http://www.fgwilson.com
** Bruno S.R.L. S.S. 91 Km 0,600 I-8305 Grottaminarda (AV) Italy Tel: +39 0825 421005 Fax: +39 0825 426169 Email: dir@brunogenerators.it Web : www.brunogenerators.it	Western Pacific Yanmar Web: http://www.yanmar.co.jp/en
** Coelmo S.R.L. Agglomerato Industriale ASI I-80011 Accera (NA) Italy Tel: +39 081 8039 731 Fax : + 39 081 8039 724 Email: lgordano@coelmo.it Web: www.coelmo.it	

** Currently have a long-term purchase agreement (LTA) with UNICEF-SD

E001.3 Voltage stabilizers for larger vaccine stores

Fluctuations in the electricity supply can cause the premature failure of motors, compressors and other electrical and electronic components. Fortunately, fluctuations can be controlled effectively, and damage can be avoided, by installing a *voltage stabilizer* on the power line which supplies the equipment. In addition, a *surge protection* device is recommended to prevent damage in the event of lightning induced spikes on the supply line. *Lightning protection* should also be included in areas where lightning is common.

Wherever voltage fluctuations exceed $\pm 7\%$ of the rated voltage at the supply point, WHO recommends that refrigeration equipment should be connected to the mains supply via a voltage stabilizer. This applies to cold rooms, freezer rooms, vaccine refrigerators and vaccine and icepack freezers at any level in the cold chain. Associated electronic temperature monitoring equipment and computers should also be connected to a voltage-regulated circuit; this type of equipment is particularly sensitive to voltage fluctuations and to lightning-induced power surges.

There are various types of *surge protector*. Some can only survive a limited number of surge events; with this type of equipment it is essential to stock an adequate stock of replacement components and to know how to replace them in the event of a failure.

It is generally good practise to ensure that refrigeration equipment and temperature monitoring/computers are supplied by separate dedicated supplies with separate voltage stabilizers. This ensures that the load variation of the refrigeration equipment does not adversely affect the electronic equipment, and allows the most appropriate type of voltage stabilizer to be chosen for each of the two load types.

Finally, the cost and design life of available equipment varies widely, with a design life of up to 50 years possible for highly critical applications. Large vaccine stores can hold hundreds of thousands dollars worth of vaccine and the cost of losing this inventory needs to be taken into account when choosing a voltage stabilizer and/or surge protector - it may be economically justifiable to install a more expensive system because it is more reliable and longer lasting.

E001.3.1 Types of stabilizer

The chosen voltage stabilizer must be able to cope with the full range of voltage fluctuations found at the vaccine store site. Within the parameters outlined above, it must also be affordable.

Servo-mechanical voltage stabilizers provide a reliable and economical method of stabilising mains voltage range variations of up to 50%. They use a proven technology that combines electro-mechanical components with electronic sensing and control to give a continuous, smooth and very stable output voltage. Servo-mechanical voltage stabilizers have some moving parts which, depending on the application, will require a small amount of low-level maintenance after a long period of time.

This technology is the most suitable one for primary vaccine stores and for larger sub-national stores. A disadvantage of the technology is its slow response time to voltage changes, but this is not considered to be a major drawback for cold store equipment. Another disadvantage is that it may be less reliable than tap-changing, particularly if the equipment is not properly maintained.

Electronic voltage stabilizers: A solid-state continuous acting electronic voltage stabilizer provides a better alternative for applications requiring extremely fast correction speed, or applications located in hostile climatic conditions. A problem with cheaper models of this type of equipment is that they often incorporate a cooling fan. These may clog up in dusty conditions. Alternatives which rely entirely on convection cooling are available, but they are typically more expensive than servo-mechanical devices.

Tap-changing voltage stabilizers and conditioners: There are a number of different tap-changing regulators on the market and some are more reliable than others. A common type, used by many manufacturers, incorporates electronic tap-changing techniques. This type is prone to failure due to switching stresses. The more reliable devices use relays.

For less sensitive equipment, where the output voltage only needs to be maintained within broad limits, a tap-changing solution is acceptable. All tap-changing regulators produce voltage jumps at the moment of tap-changing; fortunately refrigeration and air-conditioning units can accept these jumps. Tap-changing regulators may be unsuitable for loads such as sensitive monitoring equipment because they can cause graphic distortion or data loss. If ignored, this will eventually shorten the life of the connected equipment, or cause expensive damage.

Tap-changing regulators are an appropriate choice for stabilizing the supply to individual refrigerators or freezers in small sub-national stores and at service point level. As an example, one widely used unit can control output voltages between -8% to +9% when the input voltage varies between -34% to +26%. These units should always include a time delay cut out to protect against high/low voltage damage to refrigeration compressors. High capacity tap-changing units are available for cold rooms, but are typically more expensive than equivalent servo-mechanical units.

E001.3.2 When to install a voltage stabilizer

Voltage stabilizers are strongly recommended whenever new vaccine refrigeration equipment is being installed, particularly where a problem exists with the electricity supply to the site. If existing vaccine cold room motors, compressors, relays and other related electric equipment suffer frequent failure; this is a good indication that the stability of the mains supply is poor.

If the area surrounding the vaccine store is under development, there is a risk that the development of the electricity supply will not match growing demand. This can lead to an unstable, unreliable or fluctuating electricity supply. In such situations it is prudent to install voltage regulation equipment as a precautionary measure.

E001.3.3 Inviting tenders for a voltage stabilizer

Prepare a tender short list and provide bidders with the following information::

1. *Rated mains supply:* **Either:** Single phase, 2-wire (phase and neutral), and system voltage, for example 110V, 220V or 240V. **Or:** Three-phase, 4-wire (three-phase and neutral), and system voltage, for example: 380/220V or 415/240V.
2. *Supply frequency:* 50 Hz or 60 Hz.
3. *Measured voltage and frequency fluctuations:* A qualified electrical engineer should be asked to obtain these measurements, which should be taken at frequent intervals over a period of at least a week. Allow for all potential loads and allow also for seasonal load variations.
4. *Electrical storm activity:* Indicate the frequency and intensity of electrical storms.
5. *Connected equipment:* Provide a schedule listing every item of connected equipment, including cold rooms, freezer rooms, refrigerators and freezers. In addition, list all other equipment for which voltage regulation and surge protection is required, such as computers, printers, and electric lighting. For each item on the list, give the power requirement in kW. In the case of motors (e.g. cold room compressors), give the method of starting, e.g. direct-on-line (DOL). If you cannot find this information, give full details of each item of equipment, including manufacturer and model number, and request the tenderer to obtain the missing data.
6. *Site conditions:* Peak ambient temperature and humidity may affect equipment performance. Give the annual maximum temperature at the site in degrees centigrade together with the maximum relative humidity in percent.
7. *Generator:* If there is a standby generator, provide full details of the unit, including make, model, kVA rating, start method (manual or automatic mains-failure) and stop method (manual or mains-resumption).

E001.3.4 Suppliers of voltage stabilizers

Inclusion in the following list does not imply recommendation by the World Health Organization.

The Americas Eaton (was Best Power) 8609 Six Forks Road Raleigh, NC 27615 U.S.A. Tel: +1 919 872 3020 Email: powerquality@eaton.com Web: www.bestpower.com	Advance Electronics Ltd Advance Park Wrexham LL14 3YR United Kingdom Tel: +44 (0)1978 821000 Fax: +44 (0)1978 821 000 Email: sales@aelgroup.co.uk Web: www.aelgroup.co.uk
Europe Claude Lyons Ltd. Brook Road Waltham Cross Hertfordshire EN8 7LR United Kingdom Tel: +44 (0) 1992 768 888 Fax: +44 (0) 1992 788 000 Email: info@claudelyons.co.uk Web: www.claudelyons.co.uk	Watford Control Instruments Ltd. 5 Godwin Road Corby, Northants NN17 4DS United Kingdom Telephone: 44 (1536) 401345 Fax: 44 (1536) 401164 Email: sales@watfordcontrol.co.uk Web: www.watfordcontrol.co.uk

E001 data sheets follow



E001: Cold rooms and freezer rooms

PQS code:	E001/001
Description:	Cold rooms and Freezer rooms
Manufactured in:	Finland
Company:	Porkka Finland Oy
Address:	Soisalmentie 3 FI-15860 Hollola Finland
Telephone:	+358 20 5555 - 12
Email:	petri.hiilloste@huurre.com ; gordonmacbride@porkka.co.uk
Web address:	www.porkka.fi

Specifications

Temperature zones: Hot Temperate Cold

ENCLOSURE CONSTRUCTION OPTIONS

Cold room sizes:	>10 m3	Freezer room sizes:	>10 m3
Wall&ceiling panel finish	Polyester coated steel	Panel insulation material:	Polyurethane high density
Floor panel finish	Glassfiber re-enforced anti-slip plywood	Panel thickness options:	100mm (standard); 150mm (option)
Mounting options:	Wall	Panel jointing system:	Cam-lock jointing
Shelving system:	Adjustable shelves only	Shelving material:	Plastic

EQUIPMENT OPTIONS

Refrige. units options:	- Monoblock - Split system -	Refrigerant:	R-404a
Duty sharing:	- Timed changeover - Manual changeover -	Foaming agent:	N-Pentane
Plume guard:	Yes	Cold climate protection:	Yes
Door seal heater:	Yes	Auto-defrost:	Yes
Pressure valve:	Yes	Floor panel heater:	Yes
Voltage regulator:	Yes	Strip curtain:	Yes
Voltage options:	Yes	IEC 60335:	Yes
Cut-out system:	Yes	Surge protection:	Yes

TEMPERATURE MONITORING & ALARM OPTIONS:

Temperature recording:	- Dial thermometer - Event logger -	Alarm system:	Yes
Comments:	Can provide cold rooms larger than 40m3		
Quality standard:	- ISO 9001 - ISO 13485 -	ISO 14001:	Yes
Supplied regions:	All	Installation service:	- Advisory service - Installer network -
Warranty period:	1 year	Maintenance service:	- Advisory service - Maintenance network -
Current PQS status:	pre-qualified 17 Aug 2010	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E001: Cold rooms and freezer rooms

PQS code: E001/002
Description: Cold rooms and freezer rooms
Manufactured in: France
Company: Zhendre Froid & Climatisation
122 Avenue des Pyrénées – B.P. 82
33883 Villenave d'Ornon
France
Address:

Telephone: + 33 (0)5 56 87 71 22
Email: ftiercelin@zhendre.com
Web address: www.zhendre.com

Specifications

Temperature zones: Hot Temperate Cold

ENCLOSURE CONSTRUCTION OPTIONS

Cold room sizes:	>10m3	Freezer room sizes:	>10 m3
Wall&ceiling panel finish	Galvanized steel 5/10 Iceberg white powdered-coated	Panel insulation material:	Polyurethane high density
Floor panel finish	Phenolic resin	Panel thickness options:	100 mm
Mounting options:	Wall Wall split	Panel jointing system:	cam-lock, 2 polyethylene joints onto the 4 edges of each panel
Shelving system:	Adjustable shelves only	Shelving material:	Steel

EQUIPMENT OPTIONS

Refrige. units options:	- Monoblock - Split system -	Refrigerant:	R404a
Duty sharing:	- Manual changeover -	Foaming agent:	Polyurethane high density
Plume guard:	Yes	Cold climate protection:	Yes
Door seal heater:	Yes	Auto-defrost:	Yes
Pressure valve:	Yes	Floor panel heater:	No
Voltage regulator:	No	Strip curtain:	Yes
Voltage options:	Yes	IEC 60335:	Yes
Cut-out system:	Yes	Surge protection:	Yes

TEMPERATURE MONITORING & ALARM OPTIONS:

Temperature recording:	- Dial thermometer -	Alarm system:	Yes
Comments:			
Quality standard:	- ISO 9001 -	ISO 14001:	Yes
Supplied regions:	All regions	Installation service:	- Advisory service - Installer network -
Warranty period:	1 year	Maintenance service:	- Advisory service - Maintenance network -
Current PQS status:	pre-qualified 20 Apr 2011	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E001: Cold rooms and freezer rooms

PQS code:	E001/003
Description:	Cold rooms and freezer rooms
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Address:	
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Temperature zones: Hot Temperate Moderate

ENCLOSURE CONSTRUCTION OPTIONS

Cold room sizes:	>10m ³	Freezer room sizes:	>10 m ³
Wall&ceiling panel finish	Zinc polyester powdered coated	Panel insulation material:	Polyurethane
Floor panel finish	Rubber corrugated	Panel thickness options:	100 - 150 mm
Mounting options:	Wall Ceiling	Panel jointing system:	Tongue and groove, cam lock
Shelving system:	Adjustable shelves only	Shelving material:	Steel

EQUIPMENT OPTIONS

Refrige. units options:	- Monoblock -	Refrigerant:	R 404a
Duty sharing:	- Manual changeover -	Foaming agent:	Polyurethane
Plume guard:	Yes	Cold climate protection:	No
Door seal heater:	Yes	Auto-defrost:	Yes
Pressure valve:	Yes	Floor panel heater:	Yes
Voltage regulator:	No	Strip curtain:	Yes
Voltage options:	Yes	IEC 60335:	Yes
Cut-out system:	Yes	Surge protection:	No

TEMPERATURE MONITORING & ALARM OPTIONS:

Temperature recording:	- Event logger -	Alarm system:	Yes
Comments:	Upon request: AVR; Surge protection; split units - Cold climate protection not yet available. Event logger: Haier Intelligent Recorder		
Quality standard:	- ISO 9001 - ISO 13485 -	ISO 14001:	Yes
Supplied regions:	All regions	Installation service:	- Advisory service -
Warranty period:		Maintenance service:	- Advisory service -
Current PQS status:	pre-qualified 25 Oct 2011	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E001: Cold rooms and freezer rooms

PQS code: E001/004
Description: Cold Rooms & Freezer Rooms
Manufactured in: United Kingdom
Company: FOSTER Refrigerator
Address: Old Meadow Road,
King's Lynn, Norfolk
PE 30 4JU
United Kingdom
Telephone: +44 1553 691122
Email: export@foster-uk.com
Web address: www.fosterrefrigerator.co.uk

Specifications

Temperature zones: Hot Temperate Cold

ENCLOSURE CONSTRUCTION OPTIONS

Cold room sizes:	10m3	Freezer room sizes:	>10 m3
Wall&ceiling panel finish	White foodsafe laminate on galvanised steel substrate	Panel insulation material:	High density CFC free polyurethane
Floor panel finish	Rigidised galvanised steel	Panel thickness options:	75 to 100 mm
Mounting options:	Wall Ceiling	Panel jointing system:	Cam locks at regular interval with factory cut corners
Shelving system:	Fixed shelves only	Shelving material:	Steel

EQUIPMENT OPTIONS

Refrige. units options:	- Monoblock - Split system -	Refrigerant:	R404a
Duty sharing:	- Timed changeover - Manual changeover -	Foaming agent:	High density polyurethane
Plume guard:	Yes	Cold climate protection:	Yes
Door seal heater:	Yes	Auto-defrost:	Yes
Pressure valve:	Yes	Floor panel heater:	Yes
Voltage regulator:	Yes	Strip curtain:	Yes
Voltage options:	Yes	IEC 60335:	Yes
Cut-out system:	Yes	Surge protection:	Yes

TEMPERATURE MONITORING & ALARM OPTIONS:

Temperature recording:	- Dial thermometer - Event logger -	Alarm system:	Yes
Comments:			
Quality standard:	- ISO 9001 -	ISO 14001:	Yes
Supplied regions:	All regions	Installation service:	- Advisory service - Installer network -
Warranty period:	1 Year	Maintenance service:	- Advisory service - Maintenance network -
Current PQS status:	pre-qualified 26 May 2015	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.

E003

Refrigerators and freezers

The PQS specifications require better temperature control than was previously the case. These changes are mainly intended to reduce the risk of accidental freezing of vaccines stored in refrigerators and to eliminate the need for thermostat adjustment on electric compression cycle appliances. These and other changes from the earlier PIS specifications are detailed below.

E003.1 Refrigerator and freezer technologies

Refrigerators and freezers can operate on electricity or on heat derived from the burning a liquid fuel or gas.

Electricity may be supplied from the mains, from an electric generator or from renewable energy sources; typically solar power supplied from a photovoltaic array (with or without storage batteries). Most electric refrigerators are vapour-compression cycle units, of which the ice lined refrigerator (ILR) is a special type.

Absorption cycle refrigerators use heat to produce refrigeration. Most absorption units burn LP gas or kerosene. Some operate with electric resistance heating and combination units can use fuel or electricity in the same refrigerator.

The table below summarizes the advantages and disadvantages of each refrigeration technology and energy source.

Refrigeration options

Refrigeration cycle and energy source	Thermostatic control	Routine maintenance	Overall cost	Other remarks
Compression cycle with reliable electricity	Good	Very little required.	Low	Voltage regulator required when voltage varies widely.
Compression cycle ILR with intermittent electricity	Good	Very little required	Low	Voltage regulator required when voltage varies widely.
Solar electricity/ direct drive compression cycle	Good	Routine solar module maintenance	Medium	Requires an established solar service network and good solar site evaluation.
Solar electricity/ battery powered compression cycle	Good	Routine battery and solar module maintenance	High	Requires an established solar service network and good solar site evaluation. Essential to plan for and provide funding

Refrigeration cycle and energy source	Thermostatic control	Routine maintenance	Overall cost	Other remarks
				for battery replacement.
Absorption cycle/ electric	Good	Little required	Medium	Requires frequent replacement of heating element when voltage varies widely, unless a voltage regulator is used. Consumes significantly more electricity than compression cycle equivalents.
Absorption cycle/ LP gas	Partial	Little required	Medium	Pilot flame can cause excessive cooling in low ambient temperatures.
Absorption cycle/ kerosene	None*	Frequent cleaning and adjustment of wick and flue	High	Kerosene needs to be filtered before use.

* No thermostat control. Wick must be manually adjusted day and night to control internal temperature when external temperatures vary or when icepacks are being frozen. WHO prequalification for this type of refrigerator is phased out.

E003.2 PQS compression refrigerators and freezers

Compression refrigerators and freezers are powered by electricity; they cannot operate on gas or kerosene. The electrical supply may come from the mains, a generator or from a renewable energy source such as solar power, with or without a battery pack. Compared to absorption options their great advantage is that compression refrigeration provides powerful and more energy efficient cooling. In addition, compression units have better temperature control in most conditions and less refrigerator maintenance is required.

All new PQS pre-qualified compression refrigerators listed in the data sheets in this section have vaccine storage compartments that are designed not to freeze if used in accordance with manufacturers' instructions. In addition they now have non-adjustable thermostats. However, if vaccines are placed against the internal lining without baskets there is still a risk of freezing. In 2016 PQS has introduced a grading scale A, B and C where appliances graded A are certified as low vaccine freezing risk even if baskets are not used (see paragraph on freeze-protection). This new approach should eliminate accidental freezing due to improper users' interventions such as thermostat adjustment or misplacement of vaccines in the refrigerator compartment.

Low-energy chest freezers: These units are used to store OPV in bulk. Typically they are used in smaller primary stores, where a freezer room is not justified, and at intermediate level. They can also be used to freeze water-packs and/or to store frozen icepacks.

WARNING: A freezer containing vaccine should never be used to freeze water-packs at the same time.

Rapid water-pack freezers: There are two types of rapid waterpacks freezer; front loading upright units and chest freezers with fast freeze sections – the fast-freeze section is used to freeze the waterpacks and the remainder of the cabinet is used to store them when frozen. These units are particularly useful when large quantities of icepacks are needed in a short time.

E003.2.1 mains powered refrigerators and freezers

E003.2.1.1 Compression refrigerators and freezers with no additional lining

These are standard refrigerators that have been tested to ensure that acceptable vaccine storage temperatures between +2°C and +8°C are maintained in the vaccine storage areas. No freezing (i.e. temperature of 0°C or less) is accepted. If power is interrupted, these refrigerators will remain below +10°C for at least 4 hours.

E003.2.1.2 Ice-lined refrigerators (ILR)

Most ILRs can maintain acceptable temperatures below +10°C on as little as 8 hours of electricity per 24 hours, day after day. Ice-lined refrigerators are the best choice wherever there is at least 8 hours electricity a day, but no standby power supply.

Cooling during power cuts is maintained by an internal lining surrounding the vaccine storage compartment. The lining is made up of ice or cold water-filled compartments or frozen icepacks. When the electricity supply fails, this ice or cold water store keeps the vaccine cool for at least 20 hours. When the power is restored, the compressor runs until the lining is re-frozen or re-cooled.

Other new ILR-like products make novel use of chilled water and ice combined. These refrigerators can operate on fewer hours of power per day and provides over 10 days of acceptable temperature control without electricity, when fully charged. Temperature control is inherently stable and potentially extends the reach of the ILR approach to areas with as little as 28 hours of power per week or an average of 4 hours per day.

WARNING: During the re-freezing process, some areas of an ILR can fall below 0°C – for example, the bottom of the compartment. For non-grade A appliances freeze-sensitive vaccines should NEVER be stored within 150 mm of the base of these models. Always respect the manufacturer's storage limit lines inside the cabinet, indicating the extent of the hazardous zone and always use the vaccine storage baskets provided by the manufacturer.

In order to avoid the freezing problem, some programmes adjust the thermostats on older ILRs so that the water-filled lining remains liquid. This strategy reduces the appliance's cold-life but does eliminate the freezing risk. It should be adopted only after a carefully conducted study using data loggers to monitor vaccine temperature in the cold chain. Refer to: [WHO/IVB/05.01](#): *WHO Study Protocol for Temperature Monitoring in the Vaccine Cold Chain*.

E003.2.2 Solar refrigerators and freezers¹

Solar powered vaccine refrigeration systems are now widely used. They are sometimes the only available solution in areas where no reliable conventional energy supply is available. WHO, PATH and others have conducted several in depth reviews of solar vaccine refrigeration programmes launched in Africa, the Americas and in South-East Asia. These have shown that:

- The technology can be reliable and improve the quality of the vaccine cold chain when compared with the use of absorption refrigerators.
- The 10 year life cycle cost of solar direct drive systems is estimated to be equal or lower than gas-powered refrigeration systems in settings where bottled gas is readily available and its supply is reliable.

¹ For more information on solar refrigeration consult the WHO/UNICEF Guide: Introducing solar-powered vaccine refrigerator and freezer systems, a guide for managers in national immunization programmes

- The 10 year life cycle cost of solar battery powered systems remains relatively high in comparison with gas-powered refrigeration systems. Maintenance and replacement of batteries and regulators remains the major problem. Field reports historically indicate that on average, replacement is necessary after five years and these systems are often located in remote isolated areas making maintenance and battery replacement challenging.
- Solar modules must be physically secure because theft of solar modules and batteries is a growing problem.
- It is essential to ensure that a qualified servicing network is in place to make an on/site assessment, install the systems and provide long-term system maintenance. Replacement of parts such as batteries, battery charge regulators and refrigerator components must be anticipated and fully funded.

Both direct-drive and battery powered models currently provide vaccine storage at +2°C to +8°C. The flow chart under section E003.5 provides guidance on when to select solar refrigeration. It is essential to ensure that there is adequate sunlight throughout the year at all the proposed sites and a solar site evaluation must be conducted before the equipment is ordered.

There are now two types of solar refrigeration. The first type consists of a compression-cycle refrigerator or freezer or combined refrigerator/freezer powered by a battery pack which is charged by a photovoltaic array. The second type is a compression-cycle refrigerator or freezer or combined refrigerator/freezer directly driven by the solar array. No batteries are needed to operate the compressor. A sub-category of this type uses an ancillary battery to operate a fan.

Field reports indicated that battery-powered solar refrigeration systems can sometimes achieve a 10+ year service life. This is only possible if the installation is properly planned, correctly designed, competently installed and then supported by a regular maintenance program with adequate, ongoing funding.

Solar refrigeration is now a mature technology that can be used with confidence provided certain fundamental conditions are met. These conditions are:

1. *Maintenance and repair:* All solar equipment requires maintenance or it will fail, especially power systems with a battery. Plan for maintenance in accordance with maintenance tools for users and technicians; provide adequate funding in advance and carry out the work in a timely manner. Only install solar refrigerators at sites which can consistently be reached by a qualified service network throughout the year and in a reasonable time.
2. *Equipment selection:* A purchase should not be committed until the solar site evaluation has been completed. Then only refrigeration equipment that has been pre-qualified under PQS and which is suitable for the climatic conditions at the selected site(s) should be considered. Qualified Suppliers should provide a solar power system that is matched to the refrigeration equipment, meets PQS equipment specifications and is suitable for the site specific climate. Before buying a large quantity of equipment, a pilot study with one or few systems is to be conducted in order to assess the installation feasibility and the good working conditions in country.
3. *Solar direct drive installations:* Close attention to the warning given below should be paid.
4. *Solar site evaluation:* Subject to condition 1, the system supplier/installer must carry out a site evaluation and must confirm in writing that:
 - The refrigerator can be located in a level, secure and safe position out of direct sunlight and moisture.

- The proposed site has sufficient solar radiation throughout the year to power the chosen equipment (verified by officially-sourced regional multi-year weather data) and that system performance will not be compromised as a result of persistent dust storms, fog, air pollution or other more localized atmospheric effects.
- A solar site analysis has quantified the times of and the amount of shading on the proposed solar array location.
- The system autonomy (amount of energy stored for periods of low solar radiation) has been assessed and is matched to the site specific autonomy requirement as determined by specification PQS E003 PV01.
- The site for the solar array is not shaded by trees, vegetation, poles, cables, adjoining structures or buildings. Even something as small as an overhanging cable can seriously affect the efficiency of some solar modules.
- There is a suitable place to mount the solar array so that it cannot easily be vandalized, stolen, or accidentally damaged.
- Safe access can be provided to clean and maintain the solar array. Note: this is especially important where snow or dust storms are common.
- Details are specified for any roof strengthening required and clear guidance is provided on the installation of access ladders and/or safety ropes.
- All cable lengths are estimated as accurately as possible in advance.
- if batteries are used, advice is provided on a suitable and secure location for a battery enclosure (a locking, ventilated box) close to the vaccine refrigerator/freezer

ONLY proceed if all of these conditions can be met.

5. *Site preparation:* The solar site evaluation may show that preparatory building works are required to make the site safe and suitable. If this is so, make arrangements to carry out this work before the equipment is delivered.
6. *Servicing network:* There must be a competent, trained and affordable solar servicing network in the country. This service network must offer installation and long-term support with a reliable supply of spare parts for the refrigerator, the solar array and battery system (if used).
7. *Installation:* It is essential that the equipment be installed and commissioned in accordance with the relevant PQS Quality Assurance protocol: PQS PV01-VP2 *Solar power system for compression-cycle refrigerator or combined refrigerator/water-pack freezer.*
8. *User training:* Users must be trained in the operation and maintenance of the system. They should also be provided with clear instructions on whom to inform in case of maintenance requests or system failure.

WARNING: The freezer compartments of PQS pre-qualified solar refrigerators are not suitable for storing or freezing vaccines. Freezer compartments should only be used to freeze water-packs.

WARNING: Some single compressor solar refrigerators may not be able to freeze icepacks when the ambient temperature is permanently below +15°C to +20°C. If you plan to use a solar refrigerator in a mountainous area, or an area where the ambient

temperature is permanently or seasonally low, you should select a system with two independent compressors or a model that has shown good performance at low temperatures.

WARNING: The photovoltaic panels and battery packs which power the vaccine refrigerator must be used for this purpose alone. If there is a need for additional photovoltaic power on the site – for example for health facility lighting, for small-scale laboratory equipment and the like – this must be supplied from a separate system. If other equipment is supplied from the refrigerator battery pack, its use may be difficult to control and this will drain power and could compromise the vaccine.

PQS is currently working on Solar Energy Harvest Controller specifications. These devices will provide the possibility to use some extra energy supplied by solar arrays, while securing the power to the appliance.

SOLAR DIRECT DRIVE WARNING: PQS pre-qualified equipment may only be used within the limits stated on the relevant PQS sheet. Manufacturers are required to nominate a solar array size at the time of testing. The output from that solar array is used to determine the performance of the refrigerators. Only the nominated array size that is stated on the PQS sheet, or a larger array, may safely be used.

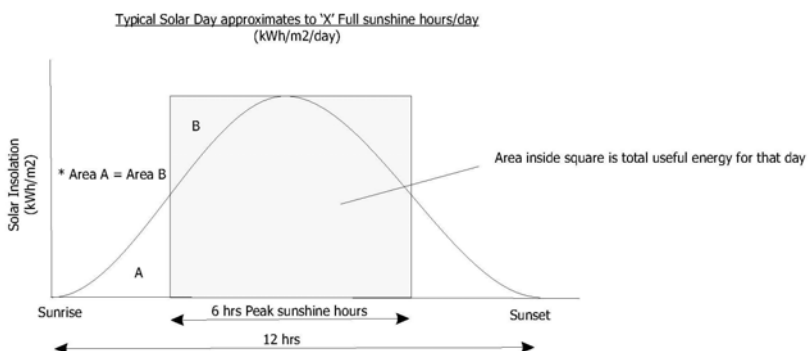
The solar direct drive refrigerators listed in this catalogue are laboratory tested over a specific ambient temperature range using a specific solar diurnal power cycle.

Establishing the correct size of the photovoltaic array for a solar direct drive refrigerator installation **cannot** be done by the purchasing agency. Both ambient temperature and solar power interact in complex ways and correct site-specific sizing requires a high level of technical expertise. The diagrams below illustrate this point.

Any changes to array components **must always** be done by the photovoltaic power system supplier working closely with the manufacturer of the direct drive refrigerator and checked and approved by WHO.

The diagram below illustrates a typical power curve for a solar refrigerator with batteries. In this example, all the solar energy under the curve is useful energy and can be used to charge the battery pack; the shaded area approximates this useful energy, and the curve represents the varying sunshine levels over the whole day.

Typical power curve for solar refrigerator with batteries



Typically solar energy is expressed as Peak Sunshine Hours often ranging from 3.5 hrs to 6 hrs. The units for this are kWh/m²/day. So although there may be 12 hours of 'daylight' the energy from all of this is the same as 6 hours of midday sunshine.

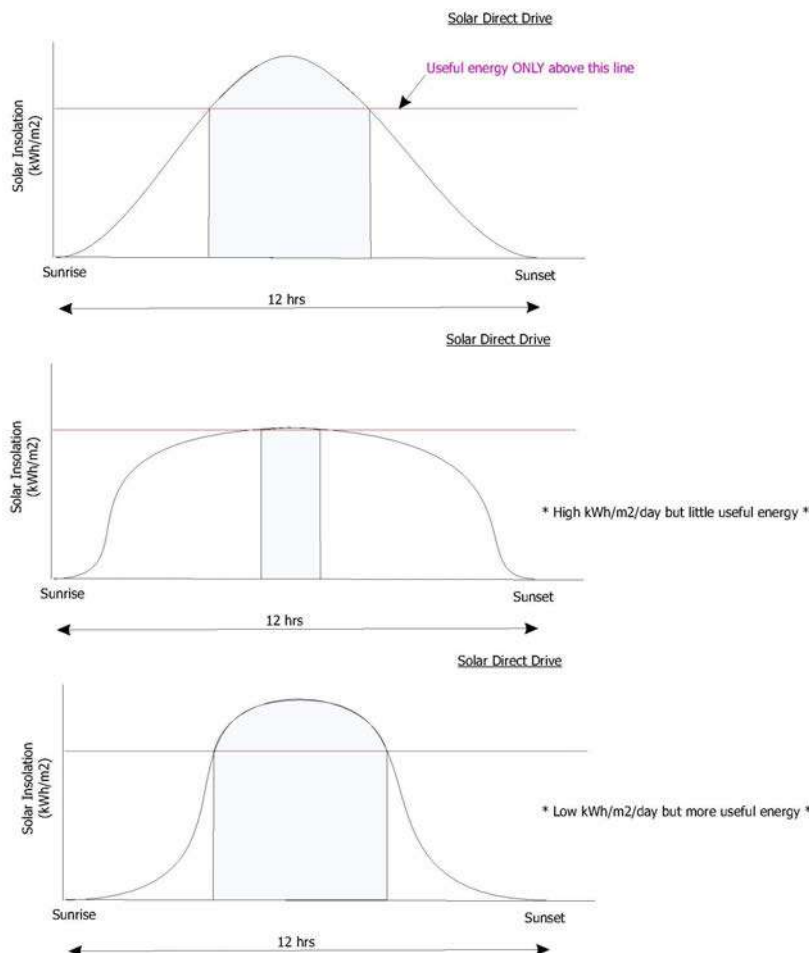
This approximation is so commonly used for solar refrigerators with batteries that it may be confusing when considering a direct drive solar refrigerator.

With a direct drive unit, a certain minimum power is needed to start the compressor motor. The three diagrams below illustrate how a direct drive refrigerator can only operate when the available power from the solar arrays is above the horizontal line which represents this starting load – this is usually a shorter period than for a battery operated unit. Below this minimum power threshold, the refrigerator cannot operate.

In the second example, although solar energy is well distributed over most of the day, only a tiny fraction exceeds the required minimum threshold. In this case a significantly larger solar panel would be needed to power the refrigerator.

In addition, because the power output of the solar panel and the performance of the refrigerator are both affected by ambient temperature², there are many complex interactions which have to be considered in the overall design for a particular site.

Power curves for solar direct drive



Source: True Energy Ltd

² Power output reduces as the temperature of the photovoltaic panel increases. Some solar direct drive units do not reliably maintain +2°C to +8°C at lower room temperatures.

E003.3 PQS absorption refrigerators and freezers

Absorption refrigerators and water-pack freezers do not perform as well as their compressor-driven equivalents. They may require constant attention to ensure adequate performance for the vaccine cold chain. There is no justification for selecting absorption equipment which runs on electricity alone.

Absorption refrigerators are driven by heat, either from an electric element, a gas flame or a kerosene wick burner. Some models combine an electrical element with either gas or kerosene which allows alternative energy sources to be used. The temperature inside an electric or gas unit is controlled automatically by a thermostat. Although the height of the gas flame is controlled by a thermostat device, the minimum 'pilot' flame can still generate storage temperatures low enough to damage freeze-sensitive vaccines when the outside ambient temperature falls below +20 °C.

Kerosene units have no thermostat; instead the temperature is controlled manually by adjusting the wick of the kerosene burner up or down.

Models that combine vaccine storage with water-pack freezing within the same insulated chamber do not control temperatures or freeze water-packs as well as models that have separate freezing and vaccine storage areas. Separate systems consisting of a refrigerator and a freezer use more fuel, but can freeze the greatest quantities of icepacks and they do provide more reliable temperature control for vaccines.

WARNING: LP gas refrigerator pilot lights can freeze vaccines when used in cooler temperatures.

WARNING: Kerosene refrigerators have no automatic temperature control requiring vigilant attention in order to provide acceptable vaccine storage temperatures and avoid freezing. They require regular maintenance, including filtering the fuel.

WARNING: Incorrect use of kerosene refrigerators can lead to fire hazards and explosions. It is absolutely essential that the manufacturer's instructions are strictly followed. Users must receive adequate training before they are allowed to operate these refrigerators.

WARNING: Absorption refrigerators must always stand firm and level otherwise they will not operate correctly.

WARNING: Operating costs can be higher with absorption refrigeration than with most other options.

E003.4 Domestic refrigerators and freezers

WARNING: Domestic compression refrigerators and freezers should never be used to store vaccines unless they have been tested against the relevant PQS verification protocol and found to be satisfactory for the setting in which they are intended to be used.

E003.4.1 Domestic refrigerators

Many countries purchase locally manufactured standard front-opening domestic refrigerators for storing EPI vaccines. This has procurement and maintenance advantages, but a number of serious performance shortcomings can compromise the cold chain and cause loss of vaccine.

WARNING: *'Multi-flow' models:* Models of this type are completely unsuitable because they are known to freeze vaccine. Multi-flow units always have a double door freezer/refrigerator combination with the freezer compartment at the top. The

refrigerator compartment is cooled with sub-zero air ducted down from the freezing compartment. They have two controls: a thermostat that controls the temperature in the freezer and a 'Thermo' control that adjusts the volume of freezing air that enters the refrigerator cabinet. If vaccine is placed in this air stream, it will freeze.

WARNING: *Single door models with internal freezer compartments:* These models may be adequate for use in moderate climates where there is a permanent electricity supply. However, they do have some serious disadvantages.

- Temperatures often fall below freezing in the zone close to the freezing compartment and/or at the bottom.
- Cabinets and doors are usually poorly insulated and are not designed to maintain the temperature range recommended for vaccine storage. Doors are fitted with shelves as well as egg and butter compartments and food drawers may be located at or near the bottom. These subsidiary storage areas are convenient to use, but are totally unsuitable for vaccines.
- Temperatures quickly rise above +8 °C when the electricity fails, and during water-pack freezing.
- Non-tropicalized models will not operate well in high ambient temperatures.

E003.4.2 Domestic freezers

When icepack freezing capacity alone is required, domestic freezers have advantages when compared to PQS prequalified equipment: they usually cost less to purchase, can be procured locally without foreign currency, are delivered more quickly, spares are stocked nationally or even locally, and technical expertise is more readily available. In addition, domestic freezers located in non-health service facilities such as restaurants, shops, etc., can be used to supply ice for outreach, mobile sessions and mass immunization activities.

E003.5 Choosing a refrigerator or freezer

When you choose a refrigerator or freezer, consider the following points (see glossary for definitions):

1. **Temperature zone:** Assess climate-specific and location-specific factors:
 - *Climate:* Identify the appropriate temperature zone by checking the mean maximum temperature during the hottest month and the mean minimum during the coldest month. Bear in mind that some parts of the country – for example, mountain regions – may require equipment with a different temperature rating than other parts³.
 - *Setting:* Choose potential appliance types to suit the setting using the table below. There are two factors to consider.
 - The mean maximum temperature in the hottest month in the area where the appliance will be located. Ignore air-conditioning because it is very likely to be off at weekends and during power cuts and cold chain equipment is often located in store rooms and the like .
 - The lowest winter temperature in the room where the appliance will be located. In cold climates, the winter temperature inside a health facility can drop below freezing – for example, where heating is absent, unreliable, or is turned off at night and/or at weekends. In such cases, choose equipment that is able to operate at low ambient

³ City-level climate data are available at: <http://www.weatherbase.com> or www.wolframalpha.com

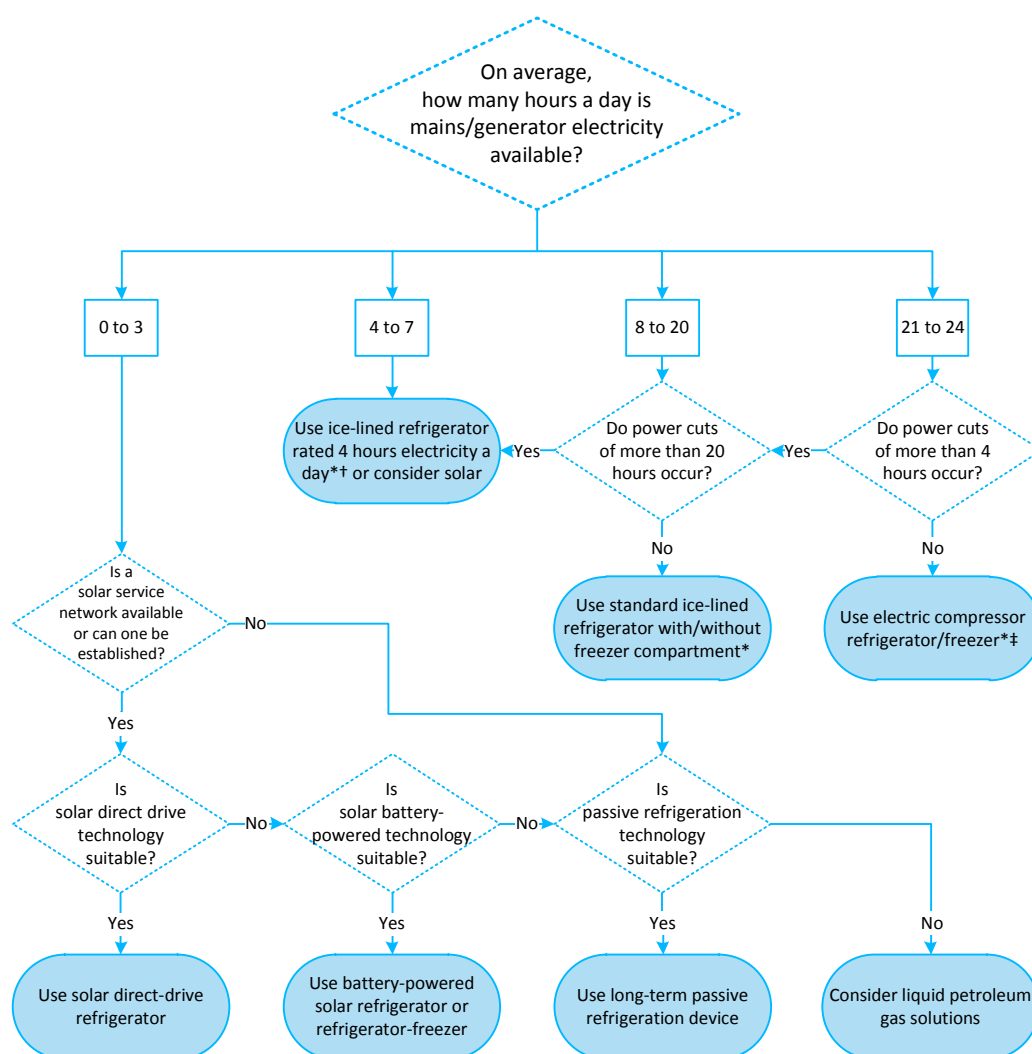
temperatures. Currently there are no models available with active low-temperature protection which can operate at temperatures below +5 °C.

Temperature zone selection

Appliance type LAT = Low Ambient Temperature rating	Mean maximum temperature in hottest month			Lowest winter room temperature	
	<= +27 °C	<= +32 °C	>+32 °C	>= +10 °C to +25 °C	< +10 °C
Hot zone			X	X	
Temperate zone		X		X	
Moderate zone	X			X	
Hot zone + LAT			X		X
Temperate zone + LAT		X			X
Moderate zone + LAT	X				X

2. **Vaccine storage capacity:** In each setting – primary store, sub-national store or health facility – assess how much vaccine must be stored at +2 °C to +8 °C and how much at -20 °C.
3. **Water-pack freezing capacity:** If icepacks are required assess how many water-packs need to be frozen per 24 hours in each setting. Choose rapid waterpack freezers when large quantities of packs need to be frozen quickly. Once frozen, the icepacks can be stored in any locally available chest freezer with low power consumption. If high throughput is not a major concern, chest freezers can be used on their own. Where cold waterpacks are used, lower cost, locally available refrigerators are perfectly adequate, so long as they are never used to store vaccine.
4. **Energy source:** Continuous refrigeration is required for vaccine storage and this requires a reliable source of power. In each setting, assess which power sources are available and which type of refrigeration is most suitable. The available sources are mains electricity, generator produced electricity, renewable energy (e.g. solar electricity), and bottled gas. Solar and gas are currently the only alternatives where mains electricity absent, or is available for less than eight hours per day. The flowchart below outlines the decision process:

Selecting a suitable energy source



* With voltage regulator

† With adequate holdover time (the time in hours during which all points in the vaccine compartment remain between +2°C and +10°C, at the maximum ambient temperature of the climate zone for which the appliance is rated, after the fuel supply has been disconnected). Refer to PQS Catalogue datasheets for holdover times of ice-lined refrigerators

‡ Do not use domestic refrigerators unless lab tested to PQS standards

5. **Associated supplies:** Make sure you order the necessary associated supplies at the same time as the refrigerator or freezer. These include:

- **Spare parts:** The data sheets in this section list the spare parts recommended for the first five years' use. To avoid shortages later, order these spares with the equipment. Before purchasing equipment check that repair facilities and spare parts are available, whether from a competent local service agent, or in-house.
- **Voltage regulator:** Unless mains electricity is highly reliable, order a voltage regulator for all mains or generator powered equipment – see section E001. Note that some suppliers include a voltage regulator either integrated in the device or bundled with the device.

- *Temperature monitoring equipment:* PQS specifications require all vaccine refrigerators and freezers, whatever the power source, to be supplied with an external reading thermometer. In addition, for reliable continuous temperature monitoring, every vaccine refrigerator should preferably be equipped with a 30-day electronic refrigerator temperature logger. See section E006. Alternatively, use a freeze indicator device to detect freezing temperatures. Note that freeze indicators need to be replaced each time an alarm is triggered and refrigerator temperature logger will need to be replaced approximately every two years when the battery runs out. Ensure that adequate recurrent funding is available to purchase these consumable items in future years. It is to be noted that future appliances will have integrated remote temperature monitoring devices as an option.
 - *Manuals:* Order user and service manuals in the appropriate language.
6. **Training:** Ensure that users and maintenance technicians are properly trained to use the specific equipment that you order. All photovoltaic systems require on-site installation by a competent technician specifically trained in solar installation work. It is also essential that adequate servicing facilities are available after the equipment has been installed. The importance of training is often underestimated and under-budgeted. A cold chain with good equipment, but inadequately trained staff, can seriously hamper an immunization programme.
 7. **Cost:** Select the best available refrigerator from the point of view of reliable temperature control and low maintenance. Do not buy solely on the basis of purchase cost. This can lead to expensive loss of vaccine and/or higher lifetime costs due to greater running and maintenance costs. Remember that, at any one time, a refrigerator may be storing vaccine worth several times the cost of the equipment. For example, a 100 litre refrigerator filled with pentavalent vaccine could be storing vaccine worth \$30-40,000. Over a 10 year life, with three-monthly deliveries, the total value of vaccine passing through the appliance could amount to more than one million dollars.

E003.6 PQS specification changes

The new PQS specifications have introduced a number of technical changes. The following are the most significant.

E003.6.1 General

PQS now allows the appliance to be either a refrigerator only or a combined refrigerator/waterpack freezer.

E003.6.2 Temperature control

Vaccine compartment temperature range: The acceptable temperature range for storing vaccine is +2°C to +8°C. However, transient excursions outside this range will be tolerated, within the following limits:

- No excursion must exceed +20°C ($\pm 0.5^\circ\text{C}$) for any amount of time.
- No excursion must drop below -0.5°C for any amount of time.
- No excursion must drop below 0°C for longer than 1 hour.
- Following an excursion below 0°C, the appliance must return to acceptable temperature range (i.e., consistently between +2°C and +8°C) within 2 hours. This duration will be measured from the moment the temperature drops below 0°C and up until it returns to +2°C.

For refrigerator testing the cumulative effect of any excursions within the above range will be assessed by calculating the mean kinetic temperature (MKT), a calculation method to account for the impact of both temperature excursions and the amount of time of each temperature excursion. This is measured over the 5 day period of day/night tests.

Freeze-protection:

PQS defines limits for internal lining temperature range as follows:

Temperature range on walls/lining of vaccine compartment: For sensors placed in direct contact with the walls/lining of the vaccine compartment, freezing temperature is defined as any of the following conditions:

- Excursion between -0.5°C and 0°C for longer than 1 hour.
- Excursion equal to or below -0.5°C for any amount of time.
- Inability to return to acceptable temperature range (i.e., consistently between +2°C and +8°C) within 2 hours following an excursion equal to or below 0°C.

Freeze-protection classification:

Devices are classified with Grade A, B or C as follows:

- **Grade A**, user-independent freeze protection (UIFP): When the appliance is used within its nominated temperature range (temperature zone +43°C, +32°C or +27°C and minimum rated ambient temperature) there is no user-intervention required to ensure that the vaccines will not be exposed to temperatures below 0°C whatever the position of the vaccine in the vaccine storage compartment.
- **Grade B**, user-dependent freeze protection (UDFP): Even if the appliance is used within its nominated temperature range, the user must comply with a procedure provided by the manufacturer and requiring one level of user-intervention (e.g., the requirement to use baskets or other items) in order to avoid vaccine freezing.
- **Grade C**, user-dependent freeze protection (UDFP): Even if the appliance is used within its nominated temperature range, the user must comply with a procedure provided by the manufacturer requiring more than one level of user-intervention in order to avoid vaccine freezing. (e.g., the requirement to use baskets and insulation barriers or covers).

Temperature control in refrigerators: Only non-adjustable thermostats are now permitted in compression refrigerators. These must be factory-set to prevent freezing in any part of the refrigerator. Incorrect thermostat adjustment is a common cause of vaccine freezing and the new electronic thermostats eliminate the need to change the setting.

E003.6.3 Temperature zones

Hot zone: Hot zone appliances must operate at a steady +43°C ambient temperature and over a +43°C/+25°C day/night cycling temperature range. Hot zone equipment may be used in a moderate and/or temperate zone. All PQS appliances are now first tested at +43°C and optionally at other temperatures.

Temperate zone: Temperate zone appliances must operate at a steady +32°C ambient temperature and over a +32°C/+15°C day/night cycling temperature range (unchanged). Temperate zone equipment may be used in a moderate zone.

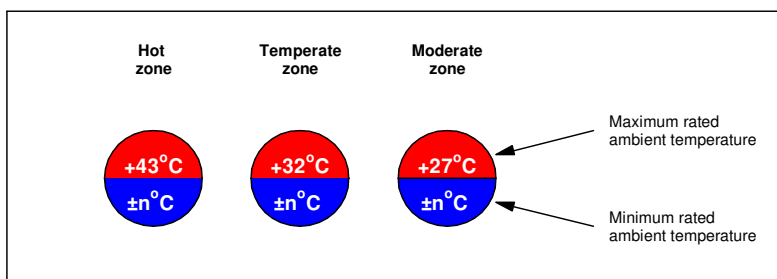
Moderate zone: There is a new category of ‘moderate zone’ appliances which must operate at a steady +27 °C ambient temperature and over a +27 °C/+10 °C day/night cycling temperature range.

Minimum rated ambient temperature: Note that the previous cold zone (+32 °C/-5 °C) category has been omitted. Instead, all hot, temperate and moderate zone refrigerators or combined refrigerator/water-pack freezers are tested to determine their *minimum rated ambient temperature*. The lowest possible rating is an ambient temperature of -10 °C and appliances without an active low temperature protection features cannot be rated below +5 °C.

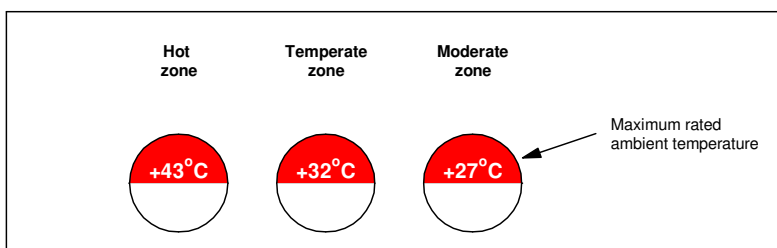
E003.6.4 Refrigerator temperature zone symbols

New symbols have been introduced to identify six general combinations of temperature zone and low temperature protection. For refrigerators, the upper semi-circle shows the maximum rated ambient temperature. If exposed to temperatures above this, the equipment will not maintain the vaccine at +2 °C to +8 °C. The lower semi-circle shows the minimum rated ambient operating temperature established by testing. If the equipment is exposed to temperatures below this figure, the vaccine will be at risk of freezing. The freezer symbols have a blank lower semi circle because minimum rated ambient temperature is not relevant.

Temperature zone symbols for vaccine refrigerators



Temperature zone symbols for vaccine freezers



E003.7 Recent and future developments

A number of interesting new developments have been pursued by WHO and its partners.

Solar direct drive freezers are now available.

Eutectic packs (phase change materials) that freeze at positive temperatures (e.g. +5 °C) may be used instead of an ice-lining to prevent vaccine freezing. This technology will provide more cooling capacity than a lining consisting of unfrozen cool water-packs. PQS will publish a list of potential usable PCMs.

Passive refrigeration option is now available for stationary use (see E004 section). This may require some form of coolant to be added periodically (e.g. weekly or monthly replenishment of ice).

Countries that wish to use locally made domestic vapour-compression refrigerators and freezers are now encouraged to laboratory test these products against the relevant PQS standards. This will help to identify potential problems before deployment takes place.

E003 data sheets follow



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/001
Type of appliance:	Battery solar powered combined refrigerator and freezer
Manufacturer's reference:	TCW 2000 DC
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Solar charged battery;#1;#Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	91 x 127 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	76		
Gross volume (Litres):	118	Gross volume:	42
Holdover time (hours):	13 hours 35 mn	Waterpack freezing capacity:	3.4 kg/24h
Energy consumption, stable running (kWh/24 hours):	0.58 kWh / 24 h		15.6 kg
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	1.23 kWh/24h	Energy consumption during freezing:	0.99 kWh/24h

Solar power system not included - contact manufacturer Shipped upon request with the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS position through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no proper display since the refrigerators do have digital display. This RTM device is exclusively bundled to B Medical Systems refrigerators / freezers. For more information, please contact B Medical Systems.			
Comments:			
Accessories:	4 baskets; 24 water-packs - 0.6 L; 4 Keys; Documentation		
Spare parts (ref, price):	Compressor Danfoss BD35F, 296.9702.07, 107.70 € E.Box BD35F, 296.9705.12, 105.38 € Electronic thermostat TCW/DC, 292.2009.01, 94.48 € Sensor for e-thermostat, 296.9804.20, 6.51 € Electronic control panel, 296.3602.82, 15.15 € Fan compressor, 296.9710.12, 52.06 € Voltage regulator 12 v, 296.9769.71, 45.45 € Fuse 15A, 296.9243.15, 0.09 € Main switch DC, 292.2044.16, 3.85 €		
Shipping volume:	1.05 m3	Shipping weight:	125 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: 2770€	40-99 units: 2630€	>100 units: 2500€
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other -	Specification ref.	
Verification report:	A65440 - February 2009	Verification laboratory:	Intertek UK
Current PQS status:	<i>pre-qualified: 17 Mar 2009</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/002
Type of appliance:	Vaccine/waterpacks freezer
Manufacturer's reference:	HBD 116
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	N/A
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	82 x 67 x 63 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: N/A
Vaccine storage capacity: (Litres)	none		
Gross volume (Litres):	none	Gross volume:	121 L
Holdover time (hours):	2 hours 29 mn	Waterpack freezing capacity:	12 kg/24 h
Energy consumption, stable running (kWh/24 hours):	0.38 kWh / 24 h		136 x 0.6 L
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):		Energy consumption during freezing:	3.77 kWh/24h

Comments:

Accessories:	Instruction manual; Keys; Tray		
Spare parts (ref, price):	Compressor Danfoss, 0070701332, 60 USD Thermostat, 0074090880, 6.8 USD Starter, 0070701332D, 7.4 USD Starter relay, 0070701331F, 7.4 USD Baskets (2), 0071090001, 7.2 USD		
Shipping volume:	0.5 m3	Shipping weight:	79 kg
Price year	2016	Incoterms	EXW
Price	410 US\$		
Quality standard:	- ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-09-145	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 24 Sep 2009	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/003
Type of appliance:	Vaccine/waterpacks freezer
Manufacturer's reference:	HBD 286
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	N/A
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	80 x 124 x 63 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: N/A
Vaccine storage capacity: (Litres)	---		
Gross volume (Litres):	---	Gross volume:	298 L
Holdover time (hours):	4 hours 9 mn	Waterpack freezing capacity:	16.8 kg/24 h
Energy consumption, stable running (kWh/24 hours):	4.36 kWh / 24 h		310 x 0.6 L
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	3.77 kWh/24h	Energy consumption during freezing:	---

Comments:

Accessories:	Instruction manual; Keys; Tray		
Spare parts (ref, price):	Compressor danfoss, 0070701332, 70.2 USD Thermostat, 0074090880, 6.8 USD Starter, 0070701332D, 7.4 USD Starter relay, 0070701331G, 7.4 USD Baskets (3), 0071090001, 7.2 USD		
Shipping volume:	0.88 m3	Shipping weight:	79 kg
Price year	2016	Incoterms	EXW
Price	521 US\$		
Quality standard:	- ISO 13485 - ISO 14001 - Other -	Specification ref.	
Verification report:	WB-09-145	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 24 Sep 2009	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/004
Type of appliance:	Waterpacks freezer
Manufacturer's reference:	TFW 800
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Multi-zone	Min rated ambient temp:	N/A
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C; +32°C; +27°C	Ext dimensions (HxLxD)	183.0 x 59.5 x 72.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: N/A
Vaccine storage capacity: (Litres)	none			
Gross volume (Litres):	none	Gross volume:	290 L	
Holdover time (hours):	N/A	Waterpack freezing capacity:	36 kg/24 h	
Energy consumption, stable running (kWh/24 hours):	3.35 kWh/24 h	Waterpack storage capacity:	187 x 0.6 L	
Energy consumption, cool down test (kWh/24 hours):	3.98 kWh/24 h	Energy consumption during freezing:	6.35 kWh/24h	
Comments:	Also available in 115V 60Hz			
Accessories:	Temperature zone indicator			
Spare parts (ref, price):	Thermostat (2), 296.9764.09, 123.00 € Compressor, 296.9701.33, 139.47 €			
Shipping volume:	1.255 m3	Shipping weight:	109 kg	
Price year	2016	Incoterms	EXW	
Price	1-39 units: 2579€	40-99 units: 2451 €	>100 units: 2330€	
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other -	Specification ref.		
Verification report:	A65808	Verification laboratory:	Intertek UK	
Current PQS status:	pre-qualified: 29 Sep 2009		Validity until: May, 2018	
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.				



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/005
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	HBC 70
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	81.8 x 67.3 x 66.3 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	45 L		
Gross volume (Litres):	71 L	Gross volume:	none
Holdover time (hours):	27 hours 18 mn	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.64 kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	2.4 kWh/24h	Energy consumption during freezing:	N/A

Comments:	Energy consumption intermittent power to be provided
Accessories:	Instruction manual; Keys; Tray
Spare parts (ref, price):	Thermostat, 0074091494; 27.6 USD Compressor, 0070701331; 94.9 USD

Shipping volume:	0.56 m3	Shipping weight:	64 kg
Price year	2016	Incoterms	EXW
Price	510 US\$		
Quality standard:	- ISO 13485 - ISO 14001 - Other -	Specification ref.	
Verification report:	WB-09-848	Verification laboratory:	CHEARI

Current PQS status:	<i>pre-qualified: 10 Oct 2009</i>	Validity until:	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/006
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	HBC 200
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	81.8 x 124.3 x 63 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	90 L		
Gross volume (Litres):	198 L	Gross volume:	none
Holdover time (hours):	31 hours 23 mn	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	1.34 kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	4.01 kWh/24h	Energy consumption during freezing:	N/A

Comments:	Energy consumption intermittent power to be provided		
Accessories:	Instruction manual; Keys; Tray		
Spare parts (ref, price):	Thermostat, 0074091494; 27.6 USD Compressor, 0070701332; 98.9 USD		
Shipping volume:	0.91 m3	Shipping weight:	108 kg
Price year	2016	Incoterms	EXW
Price	688 US\$		
Quality standard:	- ISO 13485 - ISO 14001 - Other -	Specification ref.	
Verification report:	WB-09-847	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 10 Oct 2009	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/007
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	MK 304
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Multi-zone	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C; +32°C	Ext dimensions (HxLxD)	84 x 69 x 126 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	105 L		
Gross volume (Litres):	218 L	Gross volume:	N/A
Holdover time (hours):	25.6	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	3.2 kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	5.10 kWh/24h	Energy consumption during freezing:	N/A

Comments:	Data 32°C to be provided
Accessories:	7 baskets; Temperature controller; Locking lid + Keys; Manual in 6 languages; Plywood packing
Spare parts (ref, price):	Thermostat, 7020293; 30.46 € Compressor, 8-03.6038480; 107,13 €

Shipping volume:	1.02 m3	Shipping weight:	126 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 817€	100-199 units: 803€	200 or more units: 793€
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	300-KLAB-09-142	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 25 Nov 2009</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/008
Type of appliance:	Two mode battery solar refrigerator OR freezer
Manufacturer's reference:	TCW 3000 DC
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R134a	Energy source:	Solar charged battery
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	90.5 x 126 x 82.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Litres)	109.5		
Gross volume (Litres):	204	Gross volume:	204
Holdover time (hours):	23.4 hours	Waterpack freezing capacity:	17 kg/24h
Energy consumption, stable running (kWh/24 hours):	1.01 kWh/24h		48 kg
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	2.15 kWh/24h	Energy consumption during freezing:	2.35 kWh/24h
Comments:	<p>Two-mode appliance: it works either as a refrigerator or waterpacks freezer; power source 12/24V for solar powered battery - Prices do not include the solar power system. Solar power system not included - contact manufacturer Power source: battery 12/24V DC Shipped upon request with the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS position through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no proper display since the refrigerators do have digital display. This RTM device is exclusively bundled to B Medical Systems refrigerators / freezers. For more information, please contact B Medical Systems.</p>		
Accessories:	5 baskets - 36 x 0.6 L water-packs - Keys - Instructions		
Spare parts (ref, price):	Compressor Danfoss BD80F - 296.9702.11 - 176.66 €; E-Box BD80F - 296.9705.22 - 165.82 €; Electronic thermostat TCW/DC 292.2009.01 - 94.48 €; Sensor for electronic thermostat - 296.9804.20 - 6.51 €; Control panel electronic - 296.3602.83 - 11.66 €; Fan compressor - 296.9710.71 - 65.21 €; Voltage regulator 12V - 296.9769.71 - 77.48 €; Fuse 15A - 296.9243.15 - 0.09 €; Main switch DC - 292.2044.16 - 3.85 €		
Shipping volume:	1.05 m3	Shipping weight:	125 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: 2719€	40-99 units: 2584€	>100 units: 2455€
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other -	Specification ref.	
Verification report:	A65440b and A65440c	Verification laboratory:	Intertek UK

Current PQS status: pre-qualified: 15 Dec 2009 **Validity until:** May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/009
Type of appliance:	Solar direct drive, ancillary battery refrigerator
Manufacturer's reference:	MKS 044
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Temperate	Min rated ambient temp:	+20°C
Refrigerant:	R600a	Energy source:	Solar direct drive with ancillary battery
Appliance tested at:	+32°C	Ext dimensions (HxLxD)	87.6 x 72.7 x 69.7 cm
Performance at:	+32°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER		Freeze protection: Not tested	
Vaccine storage capacity: (Liters)	19.5 L	Gross volume (Liters):	none
Gross volume (Liters):	48 L	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	147 hours	At a solar radiation reference period of:	6.0 kWh/m2/day
Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.			
Comments: Energy requirements: nominal 12 Vdc solar electric array. Minimum power 160 Watts at solar radiation reference period 6.0 kWh/m2/day Prices include the solar panel kit of 3x90Wp, roof adjustable, plug & play			
Accessories:	3 baskets; Self regulating temperature control. External electronic temperature reading; Locking lid + keys. Manual in 6 languages. Plywood packing.		
Spare parts (ref, price):	Thermostat Danfoss: 19.12 € Compressor Incl. E-Box 245 €		
Shipping volume:	0.65 m3	Shipping weight:	88 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 2434 €	100-199 units: 2399 €	200 or more units: 2363 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	300-KLAB-09-213	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 18 Mar 2010	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/010
Type of appliance:	Combined icelined refrigerator/waterpacks freezer
Manufacturer's reference:	MKF 074
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Temperate	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+32°C	Ext dimensions (HxLxD)	84 x 70 x 72 cm
Performance at:	+32°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	16 L		
Gross volume (Litres):	54 L	Gross volume:	10 L
Holdover time (hours):	52 hours 54 mn	Waterpack freezing capacity:	1.6 kg/24h 9 x 0.6 L
Energy consumption, stable running (kWh/24 hours):	3.46 kWh/24h	Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	3.18 kWh/24h	Energy consumption during freezing:	

Comments:

Accessories: 2 baskets; Self regulating temperature control; External temperature reading; Locking lid + keys; Manual in 6 languages; Plywood packing

Spare parts (ref, price): Thermostat, 7020109-01; 19.12 €
Compressor, Secop 8-03.6038602, 90.19 €

Shipping volume:	0.65 m3	Shipping weight:	90 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 761 €	100-199 units: 751 €	200 or more units: 739 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	300-KLAB-09-214	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 14 Jul 2010</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/011
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	MK 204
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	84 x 70 x 92 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	75 L		
Gross volume (Litres):	136 L	Gross volume:	none
Holdover time (hours):	20.1 hours	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	1.89 kWh/24h		N/A
Energy consumption, cool down test (kWh/24 hours):	3.58 kWh/24h	Waterpack storage capacity:	
		Energy consumption during freezing:	N/A

Comments:

Accessories: 5 baskets; Self regulating temperature control; External electronic temperature reading; Locking lid + keys; Manual in 6 languages; Plywood packing

Spare parts (ref, price): Thermostat, Danfoss 7020109-01, 19.12 €
Compressor, 8-03.6038754, 90.05 €

Shipping volume:	0.752 m3	Shipping weight:	102 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 694 €	100-199 units: 686 €	200 or more units: 677 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	300-KLAB-09-141	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 14 Jul 2010</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/012
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	MK 404
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Hot	Min rated ambient temp:	+25°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	84 x 70 x 156 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	135 L		
Gross volume (Litres):	240 L	Gross volume:	none
Holdover time (hours):	23.23 hours	Waterpack freezing capacity:	none
Energy consumption, stable running (kWh/24 hours):	3.08 kWh/24h		N/A
Energy consumption, cool down test (kWh/24 hours):	6.37 kWh/24h	Waterpack storage capacity:	
		Energy consumption during freezing:	none

Comments:

Accessories: 7 Baskets; Self regulating temperature control; Locking lid with keys; Instructions; Plywood packing

Spare parts (ref, price): Thermostat, Danfoss 7020294; 30.42 €
Compressor, Danfoss 8-03.6038754, 107.13 €

Shipping volume:	1.264 m3	Shipping weight:	
Price year	2016	Incoterms	FCA
Price	1-99 units: 945 €	100-199 units: 932 €	200 or more units: 919 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	300-KLAB-10-122	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 14 Jul 2010</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/014
Type of appliance:	Combined icelined refrigerator/waterpacks freezer
Manufacturer's reference:	TCW 2000 AC
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+15°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	90 x 127 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	60		
Gross volume (Litres):	118	Gross volume:	42
Holdover time (hours):	39.4 hours	Waterpack freezing capacity:	10 kg /24h 12 kg
Energy consumption, stable running (kWh/24 hours):	1.87 kWh/24h	Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	4.34 kWh/24h	Energy consumption during freezing:	1.95 kWh/h

Comments: Electricity source for 115V-60Hz is optional
Shipped upon request with the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS position through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no proper display since the refrigerators do have digital display. This RTM device is exclusively bundled to B Medical Systems refrigerators / freezers. For more information, please contact B Medical Systems.

Accessories: 4 baskets; 24 waterpacks 0.6L; 4 keys; Documentation

Spare parts (ref, price): Electronic Thermostat - 292.2009.00 - 89.36 €
Drier - 294.1853.02 - 1.90 €;
Fan - 296.9759.17 - 28.30 €;
Compressor - 296.9701.41 - 130.32 €;
Starting capacitor - 296.9706.48 - 11.54 €

Shipping volume:	1.05 m3	Shipping weight:	125 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: 2509 €	40-99 units: 2382 €	100 or more units: 2565 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other -	Specification ref.	
Verification report:	A65998	Verification laboratory:	Intertek UK

Current PQS status: pre-qualified: 14 Dec 2010

Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/017
Type of appliance:	Two-mode vaccine refrigerator OR waterpacks freezer
Manufacturer's reference:	TCW 3000 AC
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+15°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	91 x 127 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Litres)	150			
Gross volume (Litres):	204	Gross volume:	204	
Holdover time (hours):	53 hours 10 min; 3 hours 55 min	Waterpack freezing capacity:	N/A	
Energy consumption, stable running (kWh/24 hours):	1.37 kWh/24h; 3.83 kWh/24h	Waterpack storage capacity:	112.2 kg	
Energy consumption, cool down test (kWh/24 hours):	1.32 kWh/24h; 3.91 kWh/24h	Energy consumption during freezing:	-----	

<p>Power source option: 115V 60Hz- This appliance can be set as a refrigerator or a freezer. Double data indicates as refrigerator and as freezer. Shipped upon request with the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS position through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no proper display since the refrigerators do have digital display. This RTM device is exclusively bundled to B Medical Systems refrigerators / freezers. For more information, please contact B Medical Systems.</p>			
Comments:			
Accessories:	5 baskets; 36 waterpacks of 0.6 litre; 2 keys; documentation		
Spare parts (ref, price):	Compressor, 296.9701.33 - 167.55 € Electronic thermostat TCW3000, 292.2009.03 - 104.22 € Fan compressor, 296.9759.51 - 26.79 € Drier 13,5G R134A, 296.0945.04 - 1.89 € Starting capacitor 80 uf, 296.9706.10 - 11.13 € Starting relay, 296.9706.08 - 5.38 €		
Shipping volume:	1.071 m3	Shipping weight:	125 kgs
Price year	2016	Incoterms	EXW
Price	1-39 units: 2615 €	40-99 units: 2484 €	More than 100 units: 2361 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other -	Specification ref.	
Verification report:	WHO-11-015 & WHO-11-016	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 09 May 2011</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/020
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	BFRV 55
Manufactured in:	United States
Company:	SunDanzer Refrigeration Inc.
Address:	420 E Aviation Dr #110 Tucson, AZ 85714 USA
Telephone:	+1 (520) 882 9100
Email:	medical@sundanner.com
Web address:	http://www.sundanner.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	88.0 x 96.5 x 71.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	54.5 L	Gross volume (Liters):	N/A
Gross volume (Liters):	60.1 L	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	83 hours 29 mn	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Dossier amended 24 June 2014 - upgraded model with internal aluminum lining; Shipping information: 20 units fit onto a 20' container and 48 units into a 40' container.		
Accessories:	Four 85 watt solar panels (2 East and 2 West Facing); compass; 12V nominal; 23m PV wiring; universal solar panel mounting kit for ground, pole or roof with required tools and instructions for assembly; grounding kit (3.5" outer diameter (OD) pole not included); 2 baskets; lock; temperature display; User's Manual; Installation Manual; export crate		
Spare parts (ref, price):	Electronic Control Unit: 101N0230, 120 USD Electronic Thermostat: SDZR-PCB 3.4, 100 USD ECU Fan and Condenser Fan set: 11SD001, 30 USD Compressor: 101Z0203, 120 USD		
Shipping volume:	1.27 m3	Shipping weight:	218 kg
Price year	2016	Incoterms	EXW
Price	1-49 Units: 3,399USD	50-99 Units: 3,199USD	100+ Units: 2,999USD
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-11-109	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 13 Sep 2011		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/021
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VLS 400 Greenline
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	86.0 X 127.0 X 70.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	216 L		
Gross volume (Litres):	235 L	Gross volume:	N/A
Holdover time (hours):	30 hours	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.82 kWh/24 hours		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	0.85 kWh/24 hours	Energy consumption during freezing:	N/A

Comments:

Accessories: 7 vaccine storage baskets. Self regulating temperature control. External electronic temperature reading. Locking lid + keys. Manual in 6 languages. Plywood packing.

Spare parts (ref, price):	Thermostat - Danfoss; 7020276; 22.60 € Compressor - Secop; 8-036038255; 108.78 €		
Shipping volume:	1.02 m3	Shipping weight:	126 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 867 €	100-199 units: 851 €	200 or more units: 834 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		
Verification report:	A66543	Verification laboratory:	Intertek UK
Current PQS status:	pre-qualified: 03 Nov 2011		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/022
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	MK 144
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.comWeb address: <http://vestfrostsolutions.com/>**Specifications**

Climate zone:	Hot	Min rated ambient temp:	+25°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	88.0 x 96.5 x 71.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	48 L		
Gross volume (Litres):	63.7 L	Gross volume:	N/A
Holdover time (hours):	43 hours 8 min	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	2.30 kWh/24hours		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	2.27 kWh/24hours	Energy consumption during freezing:	N/A

Comments:**Accessories:** 3 vaccine storage baskets. Self regulating temperature control. External electronic temperature reading. Locking lid + keys. Manual in 6 languages. Plywood packing.

Spare parts (ref, price):	Thermostat - Danfoss;7020291; 30,46 € Compressor - Danfoss; 03.6038602; 90,19 €		
Shipping volume:	0,58 m3	Shipping weight:	70 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 645 €	100-199 units: 594 €	200 or more units: 586 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		
	Specification ref.		
Verification report:	300-KLAB-11-112	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 03 Nov 2011</i>		
	Validity until: May, 2018		

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/023
Type of appliance:	Vaccine/waterpacks freezer
Manufacturer's reference:	MF 314
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	N/A
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	84 x 156 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: N/A
Vaccine storage capacity: (Litres)	N/A			
Gross volume (Litres):	N/A	Gross volume:	281 L	
Holdover time (hours):	4.0 hours	Waterpack freezing capacity:	7.2 kg/24h	
Energy consumption, stable running (kWh/24 hours):	4.23 kWh/24h		256 x 0.6 L	
		Waterpack storage capacity:		
Energy consumption, cool down test (kWh/24 hours):	4.29 kWh/24h	Energy consumption during freezing:	4.24 kWh/24h	
Comments:	Vaccine/waterpacks freezer MF314; option electric mains 115V 60Hz			
Accessories:	3 Baskets External electronic temperature reading. Locking lid + keys. Manual in 6 languages. Plywood packing.			
Spare parts (ref, price):	Thermostat Danfoss 7020109-01; 19.12€ Compressor Danfoss O/C 03.6038858; 113.26€			
Shipping volume:	1.161m3	Shipping weight:	108.5 kg	
Price year	2016	Incoterms	FCA	
Price	1-99 units: 584 €	100-199 units: 576 €	200 or more units: 568 €	
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		Specification ref.	
Verification report:	A66542-3 issue 1	Verification laboratory:	Intertek UK	
Current PQS status:	<i>pre-qualified: 01 Dec 2011</i>		Validity until: <i>May, 2018</i>	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/024
Type of appliance:	Vaccine/waterpacks freezer
Manufacturer's reference:	MF 114
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	N/A
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	84 x 72 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: N/A
Vaccine storage capacity: (Litres)	N/A			
Gross volume (Litres):	N/A	Gross volume:	105 L	
Holdover time (hours):	2.8 hrs	Waterpack freezing capacity:	7.2 kg/24h	
Energy consumption, stable running (kWh/24 hours):	2.24 kWh/24hrs		64 x 0.6 L	
		Waterpack storage capacity:		
Energy consumption, cool down test (kWh/24 hours):	2.41 kWh/24hrs	Energy consumption during freezing:	3.33 kWh/24hrs	
Comments:	Vaccine waterpacks freezer MF114 option electric mains 115V 60Hz			
Accessories:	2 baskets; external electronic temperature reading; locking lid + keys; Manual in 6 languages; Plywood packing.			
Spare parts (ref, price):	Thermostat Danfoss, 7020109-01, 19,12€ Compressor Secop, 6038325, 113,26€			
Shipping volume:	0.58 m3	Shipping weight:	70 kg	
Price year	2016	Incoterms	FCA	
Price	1-99 units: 429 €	100-199 units: 422 €	200 or more units: 416 €	
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		Specification ref.	
Verification report:	A66542-1	Verification laboratory:	Intertek UK	
Current PQS status:	<i>pre-qualified: 01 Dec 2011</i>		Validity until: <i>May, 2018</i>	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/025
Type of appliance:	Vaccine/waterpacks freezer
Manufacturer's reference:	MF 214
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	N/A
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	84 x 113 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: N/A
Vaccine storage capacity: (Litres)	N/A			
Gross volume (Litres):	N/A	Gross volume:	171 L	
Holdover time (hours):	2.9 hours	Waterpack freezing capacity:	7.2 kg/24h	
Energy consumption, stable running (kWh/24 hours):	3.0 kWh/24h		160 x 0.6 L	
		Waterpack storage capacity:		
Energy consumption, cool down test (kWh/24 hours):	2.96 kWh/24h	Energy consumption during freezing:	3.56 kWh/24h	
Comments:	Vaccine waterpack freezer option for 115V 60Hz mains			
Accessories:	2 Baskets External electronic temperature reading, Locking lid + keys, Manual in 6 languages. Plywood packing.			
Spare parts (ref, price):	Thermostat Danfoss 7020109-01, 19.12 € Compressor Secop, 03-6038325, 113.26€			
Shipping volume:	0.846 m3	Shipping weight:	96.3 kg	
Price year	2016	Incoterms	FCA	
Price	1-99 units: 499 €	100-199 units: 493 €	200 or more units: 486 €	
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		Specification ref.	
Verification report:	A66542-2 issue 1	Verification laboratory:	Intertek UK	
Current PQS status:	pre-qualified: 01 Dec 2011		Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003:

Refrigerators and freezers

PQS code:	E003/026
Type of appliance:	Battery solar powered combined refrigerator and freezer
Manufacturer's reference:	VC 65-2
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R134a	Energy source:	Solar charged battery
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	93.6 x 92.9 x 77.7 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: Not tested
Vaccine storage capacity: (Litres)	37.5 L			
Gross volume (Litres):	48.3 L	Gross volume:	24.3 L	
Holdover time (hours):	3 hours 8 min	Waterpack freezing capacity:	2.4 kg/24 h	
Energy consumption, stable running (kWh/24 hours):	0.55 kWh/24h		18 x 0.6 L	
		Waterpack storage capacity:		
Energy consumption, cool down test (kWh/24 hours):	0.54 kWh/24h	Energy consumption during freezing:	0.90 kWh/24h	
Comments:	Power consumption at +32°C=0.29 kWh/24h Power consumption at +27°C=0.21 kWh/24h The appliance is supplied as a kit including solar system. Price might depend on location.			
Accessories:	Locking door; external temperature indicator; storage baskets; instruction manual			
Spare parts (ref, price):	Compressor, Danfoss BD35F, 125.00€ Compressor controller, Danfoss 101N0210; 95.00€ Thermostat AT-5BQ8L-1PS, 50.00€			
Shipping volume:	0.887 m3	Shipping weight:	92 kg	
Price year	2016	Incoterms	FCA	
Price	3275 € per unit			
Quality standard:	- ISO 9001:2008 -	Specification ref.		
Verification report:	300-KLAB-11-150	Verification laboratory:	Danish Technological Institute	
Current PQS status:	<i>pre-qualified: 20 Jan 2012</i>		Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/029
Type of appliance:	Solar direct drive, ancillary battery refrigerator
Manufacturer's reference:	HTC-60
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of

Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Temperate	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Solar direct drive with ancillary battery
Appliance tested at:	+32°C	Ext dimensions (HxLxD)	78.8 x 65.4 x 87.5 cm
Performance at:	+32°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Liters)	21 L	Gross volume (Liters):	N/A
Gross volume (Liters):	60 L	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	135 hours 30 min	At a solar radiation reference period of:	3.5 kWh/m ² /day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Recommended panels: 12 v, 3 x 120W Prices include solar system		
Accessories:	Baskets - set of keys - instruction manual		
Spare parts (ref, price):	Handle - 0070814623; 3 USD Thermostat - 0074000154; 3 USD Switch - 0074091465; 2 USD Electric controller - 0274000185; 30 USD Hinge cover - 0070204349; 1 USD Dryer filter - 0074180006; 2 USD Hinge - 0070816334; 3 USD Fan DC 12V - 0074000329; 4 USD Compressor Danfoss - 0274000118; 180 USD Rechargeable battery (12V 10Ah) - 0274000119; 85 USD		
Shipping volume:	0.7 m ³	Shipping weight:	98 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 2500 USD	100-199 units: 2450 USD	>200 units: 2400 USD
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-11-2005	Verification laboratory:	CHEARI

Current PQS status: pre-qualified: 09 Jul 2012**Validity until:** May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/030
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	TCW 3000 SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Temperate	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+32°C	Ext dimensions (HxLxD)	91 x 127 x 78 cm
Performance at:	+32°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	156	Gross volume (Liters):	N/A
Gross volume (Liters):	187	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	86 hours 56 min	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

<p>Prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable; Generator 3 = ground packed casing. Nominal 12V DC solar array, minimum power 250Watts at solar radiation reference period 3.5 kWh/m2/day Solar power system not included - contact manufacturer Power source: battery 12/24V DC Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems</p>			
Comments:			
Accessories:	Baskets, Instruction manual, set of keys		
Spare parts (ref, price):	Compressor 296.9702.09: 125.50€ E-Box 296.9705.24: 128.79€ Electronic thermostat 292.2009.05: 117.72€ Sensor for e-thermostat 296.9804.20: 8.86€ Electronic control panel 296.3602.83: 7.52€ Fan compressor 292.9960.06: 72.48€ Main switch 292.2044.18: 6.17€		
Shipping volume:	1.07 m3	Shipping weight:	114 kg
Price year	2016	Incoterms	EXW
Price	1 - 39 units: 5198€ G1; 5749€ G2 40 - 99 units: 4951€ G1; 5474€ G2 > 100 units: 4714€ G1; 5214€ G2		
Quality standard:	- ISO 9001:2008 - ISO 14001 - Other -	Specification ref.	
Verification report:	WHO 12-018	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 25 Jun 2012</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/031
Type of appliance:	Two-mode vaccine refrigerator OR waterpacks freezer
Manufacturer's reference:	VLS 200 Green line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.comWeb address: <http://vestfrostsolutions.com/>**Specifications**

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	85 x 73 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: Not tested
Vaccine storage capacity: (Litres)	60 L with baskets			
Gross volume (Litres):	113L	Gross volume:	39L	
Holdover time (hours):	24.4 hours	Waterpack freezing capacity:	5 x 0.6L / 24 hours 64 x 0.6L	
Energy consumption, stable running (kWh/24 hours):	0.71 kWh	Waterpack storage capacity:		
Energy consumption, cool down test (kWh/24 hours):	0.80 kWh	Energy consumption during freezing:	2.3kWh/24h	
Comments:	Report amended for addition of freezer mode March 2014			
Accessories:	3 Baskets Self regulating temperature control. Electronic temperature reading. Locking lid + keys, Manual in 6 languages. Plywood packing.			
Spare parts (ref, price):	Thermostat Danfoss 7020127; 22.60€ Compressor Secop 8-036038297; 101.20€			
Shipping volume:	0.58m3	Shipping weight:	70kg	
Price year	2016	Incoterms	FCA	
Price	1-99 units: 611 €	100-199 units: 601 €	200 or more units: 588 €	
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		Specification ref.	
Verification report:	1205711OMKS-001a Issue 2	Verification laboratory:	Intertek UK	
Current PQS status:	pre-qualified: 25 Jun 2012		Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/032
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VLS 300 Green Line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	85 x 92 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	98 L in baskets		
Gross volume (Litres):	157 L	Gross volume:	N/A
Holdover time (hours):	23.5 hours	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.66 kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	0.69 kWh/24h	Energy consumption during freezing:	N/A

Comments:

Accessories:	5 vaccine storage baskets. self-regulating temperature control; electronic temperature reading; Locking lid + keys, Manual in 6 languages. Plywood packing.		
Spare parts (ref, price):	Thermostat, Danfoss 7020127: 22.60€ Compressor, Secop 8-036038297; 101.20€		
Shipping volume:	0.75 m3	Shipping weight:	93 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 733 €	100-199 units: 721 €	200 or more units: 708 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		Specification ref.
Verification report:	12057110OMKS-002a	Verification laboratory:	Intertek UK
Current PQS status:	<i>pre-qualified: 08 Oct 2012</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/033
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VLS 350 Green Line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	85 x 113 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	127 L in baskets		
Gross volume (Litres):	209 L	Gross volume:	N/A
Holdover time (hours):	31.5 hours	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.61 kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	0.64 kWh/24h (13.4 hours)	Energy consumption during freezing:	N/A

Comments:

Accessories: 7 vaccine storage baskets; self-regulating temperature control; electronic temperature reading; locking lid + keys; manual in 6 languages; plywood packing.

Spare parts (ref, price): Thermostat 7020276: 22.60€
Compressor 8-036038255: 108.78€

Shipping volume:	0.85 m3	Shipping weight:	110 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 819 €	100-199 units: 803 €	200 or more units: 788 €

Quality standard: - ISO 9001:2008 - ISO 14001
- DS/OHSAS 18001:2008 - **Specification ref.**

Verification report: 12057110OMKS-003a **Verification laboratory:** Intertek UK

Current PQS status: pre-qualified: 08 Oct 2012 **Validity until:** May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.

**E003:****Refrigerators and freezers**

PQS code:	E003/034
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	HBC-110
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	86 x 63 x 81.8 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	52.5 L		
Gross volume (Litres):	110 L	Gross volume:	N/A
Holdover time (hours):	36 hours 17 min	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	1.20 kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	1.28 kWh/24h	Energy consumption during freezing:	N/A

Comments:

Accessories: 2 keys; instructions manual; baskets; stem thermometer

Spare parts (ref, price): Temperature controller, 0074091494: 42.15 USD
Handle, 0070804793: 3.38USD
Electrical wiring, 0070402374: 4.55USD
Waterpacks, 0070204756 and 0070204757: 1.00USD
Lower baskets, 0070107509: 2.00USD
Upper baskets, 0070107508: 2.05USD
Compressor, 0070701331: 121.49USD
Fan, 0075030020: 14.00USD
Condenser, 0070701369: 5.22USD

Shipping volume:	0.636 m3	Shipping weight:	93Kg
Price year	2016	Incoterms	FOB
Price	590USD		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	WB-12-1343	Verification laboratory:	CHEARI

Current PQS status: *pre-qualified: 17 Dec 2012* **Validity until:** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/035
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	TCW 2000 SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Temperate	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+32°C	Ext dimensions (HxLxD)	127 x 78 x 91 cm
Performance at:	+32°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	99	Gross volume (Liters):	42
Gross volume (Liters):	118	Waterpack freezing capacity:	2.4 kg per 24 h
		Waterpack storage capacity:	14.4 kg
Autonomy as per WHO/PQS protocols	85 hours 24 min	At a solar radiation reference period of:	3.5 kWh/m ² /day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable; Generator 3 = ground packed casing. Nominal 12V DC solar array, minimum power 500Watts at solar radiation reference period 3.5 kWh/m²/day
Solar power system not included - contact manufacturer
Power source: battery 12/24V DC
Includes free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems

Comments:**Accessories:**

4 baskets; 24 waterpacks 0.6L; 4 keys; documentation and instructions

Spare parts (ref, price):

Compressor: 296.9702.09; 125.50€
Ebox: 296.9705.24; 128.79€
Electronic thermostat: 292.2009.05; 117.72€
Sensor for e-thermostat: 296.9804.20; 8.86€
E control panel: 296.3602.82; 15.97€
Fan compressor: 292.9960.06; 72.48€
Main switch: 292.2044.18; 6.17€

Shipping volume:	1.07 m3	Shipping weight:	125 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: G1, 7484€; G2, 8580€	40-99 units: G1, 7126€; G2, 8172€	>100 units: G1, 6789€; G2, 7782€
Quality standard:	- ISO 9001:2008 - ISO 14001	Specification ref.	
Verification report:	WHO- 12-017	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 17 Dec 2012</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/036
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	ZLF 100 AC
Manufactured in:	South Africa
Company:	Zero Appliances (Pty) Ltd
Address:	P.O. Box 426 Edenvale 1610 Gauteng Province South Africa
Telephone:	(010) 207 1600
Email:	gareth@zeroappliances.co.za ; enquiries@zeroappliances.co.za
Web address:	www.zeroappliances.co.za

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	178 x 85 x 71 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	99L (one shelf) 93 L (all shelves)	
Gross volume (Litres):	124 L	Gross volume: N/A
Holdover time (hours):	113.7 hours	Waterpack freezing capacity: N/A
Energy consumption, stable running (kWh/24 hours):	1.96 kWh/24h	N/A
Energy consumption, cool down test (kWh/24 hours):	4.09 kWh/24h	Waterpack storage capacity:
		Energy consumption during freezing: N/A
Comments:	Unit uses Sure Chill® technology Holdover time has been carried out while not fully charged.	
Accessories:	3 shelves; liquid PCM to mix with water. Optional: extra shelves, drawers, plywood packaging, 2 padlocks	
Spare parts (ref, price):	External solar thermometer, IMP60: 35.00USD Compressor, IMPC20: 166.00USD Condenser and fan, IMP65: 196.00USD Electronic controller (thermostat), IMP70: 84.00USD	
Shipping volume:	1.132 m3	Shipping weight: 100kg
Price year	2016	Incoterms EXW
Price	1-49 units: 2,015 USD	50-99 units: 1,965 USD 100 and more: 1,914 USD
Quality standard:	- ISO 9001:2008 -	Specification ref.
Verification report:	100889510MKS-001	Verification laboratory: Intertek UK
Current PQS status:	pre-qualified: 14 Feb 2013	Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/037
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	ZLF 100 DC
Manufactured in:	South Africa
Company:	Zero Appliances (Pty) Ltd
Address:	P.O. Box 426 Edenvale 1610 Gauteng Province South Africa
Telephone:	(010) 207 1600
Email:	gareth@zeroappliances.co.za ; enquiries@zeroappliances.co.za
Web address:	www.zeroappliances.co.za

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	180 x 85 x 73 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	99L (one shelf); 93L (all shelves)	Gross volume (Liters):	N/A
Gross volume (Liters):	124L	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	170.1 hours	At a solar radiation reference period of:	3.5 kWh/m2/day
Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.			
Comments: Price do not include solar system (1,350 USD); Energy source: 370 Wp array at 3.5 kWh/m2/day at 43°C Entire system is plug and play with MC4 (MIC) connectors, on board isolator and surge protector. The array frame is roof adjustable.			
Accessories:	3 shelves; Liquid PCM to mix with water. Optional: Extra shelves; drawers; Plywood packaging; 1 padlock		
Spare parts (ref, price):	Compressor IMPC 151: 214.00USD Compressor controller IMP 152: 164.00USD Condenser IMP 145: 53.00USD Fan IMP 144: 33.00USD Thermostat IMP 012: 92.00USD 24V surge protector ELSP: 110.00USD		
Shipping volume:	1.132m3	Shipping weight:	115kg
Price year	2016	Incoterms	EXW
Price	up to 49units: 3,933.00 USD	50 to 99 units: 3,834.00 USD	100 or more: 3,736.00 USD
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	100963912MKS-001a Issue 2	Verification laboratory:	Intertek UK
Current PQS status:	pre-qualified: 25 Apr 2013	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/038
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	HBC-340
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of

Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	165 x 65 x 85.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	211L		
Gross volume (Litres):	340L	Gross volume:	N/A
Holdover time (hours):	53 hrs	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	2.06kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	2.13kWh/24h	Energy consumption during freezing:	N/A

Comments:	Amendments September 2015
Accessories:	Instruction manual; set of keys; baskets

Spare parts (ref, price):	3 Hinge covers Up, 0070203941: 0.51USD; 3 Hinge covers Down, 0070203942: 0.13USD; Handle, 0070814623: 3.70USD Control pannel, 0072040234: 1.55USD; Dry filter, 0074180002A: 2.00USD; Thermometre, 0271400001: 3.00USD; Temperature controller, 0074091494: 41.20USD; Compressor-/NL10MF, 0070701307: 98.30USD; Ice Pack up, 0070204756: 2.80USD; Ice Pack down, 0270200225: 5.30USD; Indicator lamp, 0075050003: 1.20USD; Basket up, 0270100218B: 3.20USD; Basket down, 0270100218A: 6.50USD; Condensor, 0070803664: 17.41USD; Fan, 0075030020: 21.20USD; Power line, 0070400252A: 6.50USD; Thermostat 0074091494: 27.6USD
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Shipping volume:	1.42 m3	Shipping weight:	165kg
Price year	2016	Incoterms	FOB
Price	1180 US\$		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	WB-13-361 amended WB-15-099	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 24 Jan 2014	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/039
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	BFRV 15
Manufactured in:	United States
Company:	SunDanzer Refrigeration Inc.
Address:	420 E Aviation Dr #110 Tucson, AZ 85714 USA
Telephone:	+1 (520) 882 9100
Email:	medical@sundanner.com
Web address:	http://www.sundanner.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	77.0 x 69.0 x 59.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	15L	Gross volume (Liters):	NA
Gross volume (Liters):	20.27L	Waterpack freezing capacity:	NA
		Waterpack storage capacity:	NA
Autonomy as per WHO/PQS protocols	101h 19min	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Shipping information: 20 units fit into a 20' container, 48 units fit into a 40' container Shipping dimensions include crate with solar power kit.		
Accessories:	Four 75 watt (or greater) solar panels (2 East and 2 West Facing); compass; 12V nominal; 23m PV wiring; universal solar panel mounting kit for ground, pole or roof with required tools and instructions for assembly; grounding kit (3.5" outer diameter (OD) pole not included); 2 baskets; lock; temperature display; User's Manual; Installation Manual; export crate		
Spare parts (ref, price):	Electronic Control Unit: 101N0230, 120 USD Electronic Thermostat: SDZR-PCB 7.4, 70 USD ECU Fan: 11SD001, 15 USD		
Shipping volume:	1.27m3	Shipping weight:	147kg
Price year	2016	Incoterms	EXW
Price	1-49 Units: 2,295USD	50-99 Units: 2,249USD	100+ Units: 2,195USD
Quality standard:	- ISO 9001:2008 -		Specification ref.
Verification report:	300-KLAB-13-193	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 13 Mar 2014</i>		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003:

Refrigerators and freezers

PQS code:	E003/040
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VC200SDD
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	94.5 x 128.5 x 73.1 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	132 L	Gross volume (Liters):	NA
Gross volume (Liters):	205.2 L	Waterpack freezing capacity:	
		Waterpack storage capacity:	
Autonomy as per WHO/PQS protocols	79h 29 min	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Incorporates Freeze Free technology. Price includes plug and play roof mounted adjustable 400W solar array		
Accessories:	Handle with in-built lock; External temperature display; Instruction manual; Baskets: 47.0 x 30.5 x 21.5 cm = 22L		
Spare parts (ref, price):	Compressor Danfoss BD35K: €178.00 - Controller Danfoss 101N0410: €140.00 SDD controller: €191.00 Solar thermometer: €38.10 - MCB fridge/Isolation switch: €19.05 - Temperature probe: €5.00		
Shipping volume:	1.2m3	Shipping weight:	129kg
Price year	2016	Incoterms	FCA
Price	€3800 including solar system		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-13-194	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 13 Mar 2014		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/041
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VLS 054 SDD Green line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.com

Web address: <http://vestfrostsolutions.com/>

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	85 x 72 x 60 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER		Freeze protection: Grade A	
Vaccine storage capacity: (Liters)	55.5L	Gross volume (Liters):	NA
Gross volume (Liters):	108l	Waterpack freezing capacity:	NA
		Waterpack storage capacity:	NA
Autonomy as per WHO/PQS protocols	72.4 hours	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Energy requirements: 12V dc solar electric array. 360W radiation reference period 3.5 kWh/m2/day. Starting load at 2000rpm 4.13A Solar array not included- contact manufacturer. Prices include the solar panel kit of 4x90Wp, roof adjustable, plug & play		
Accessories:	Vaccine storage top basket; Self regulating temperature control; Electronic temperature reading; Locking lid + keys; Manual in 6 languages; Plywood packing		
Spare parts (ref, price):	Electronic temperature controller: 41.20€ Compressor including E-box: 245.00€		
Shipping volume:	0.65m3	Shipping weight:	85kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 2.924 €	100-199 units: 2.882 €	200 or more units: 2.840 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	100918190MKS-001 issue 2	Verification laboratory:	Intertek UK
Current PQS status:	pre-qualified: 01 May 2014	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/042
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	TCW 40 SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	90 x 103 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	36	Gross volume (Liters):	4.8
Gross volume (Liters):	46.6	Waterpack freezing capacity:	1.8 kg
		Waterpack storage capacity:	5.2kg
Autonomy as per WHO/PQS protocols	81 hours 54 min	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable; Generator 3 = ground packed casing
nominal 12 V DC solar electric array. Minimum power 250 watts at solar radiation reference period 3.5 kWh/m2/day.
Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems

Comments:

Accessories:

1 basket; 8 waterpacks 0.6 L; 8 waterpack holders; 2 keys; 1 brush; 1 pan for drain; documentation

Spare parts (ref, price):

Compressor: 296.9702.09: 84.48 €
E Box: 296.9705.24: 84.42 €
Controller board: 296.9769.82: 107.21 €
Sensor cooler: 296.9804.73: 28 €
Sensor heater: 296.9804.72: 17.55 €
Fan compressor: 292.9960.06: 50,92 €
Main switch: 292.2044.11
Display board: 296.9769.81: 25.46 €

Shipping volume:

0.88m3

Shipping weight:

120kg

Price year

2016

Incoterms

EXW

Price

1-39 units: G1: 4798 €; G2: 5279 €

40-99 units: G1:4569 €; G2: 5030 €

> 100 units: G1: 4351 €; G2: 4791 €

Quality standard:

- ISO 9001:2008 - ISO 13485
- ISO 14001 -

Specification ref.

Verification report:

WHO 13-024

Verification laboratory:

CEMAFROID SAS

Current PQS status:

pre-qualified: 27 Mar 2014

Validity until:

May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/043
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	TCW 2043 SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	91 x 127 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	70	Gross volume (Liters):	42
Gross volume (Liters):	79	Waterpack freezing capacity:	2.5kg
		Waterpack storage capacity:	10.5 kg
Autonomy as per WHO/PQS protocols	73 hours 54 min	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable; Generator 3 = ground packed casing; nominal 12 V DC solar electric array. Minimum power 500 watts at solar radiation reference period 3.5 kWh/m²/day
Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems

Comments:**Accessories:**

2 baskets; 16 waterpacks 0.6 L; 4 keys; documentation; 1 pan for drain

Spare parts (ref, price):

Compressor: 296.9702.09: 84.42 €
E Box: 296.9705.24: 84.42 €
Electronic thermostat: 292.2009.05: 81.75 €
Sensor for e-thermostat: 296.9804.20: 6.15 €
Electronic control panel: 296.3602.82: 11.10 €
Fan compressor: 292.9960.06: 50.92 €
Main switch: 292.2044.18: 5.89 €

Shipping volume:	1.07m3	Shipping weight:	160kg
Price year	2016	Incoterms	EXW
Price	1-39 units: G1: 7266 €; G2: 8158 €	40-99 units: G1: 6920 €; G2: 7769 €	> 100 units: G1: 6590 €; G2: 7399 €
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WHO 13-025	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 27 Mar 2014</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/044
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	ZLF 150 AC
Manufactured in:	South Africa
Company:	Zero Appliances (Pty) Ltd
Address:	P.O. Box 426 Edenvale 1610 Gauteng Province South Africa
Telephone:	(010) 207 1600
Email:	gareth@zeroappliances.co.za ; enquiries@zeroappliances.co.za
Web address:	www.zeroappliances.co.za

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	190 x 85 x 72
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	128	
Gross volume (Litres):	161	Gross volume: N/A
Holdover time (hours):	128.2	Waterpack freezing capacity: N/A
Energy consumption, stable running (kWh/24 hours):	1.98	N/A
Energy consumption, cool down test (kWh/24 hours):	2.03	Waterpack storage capacity:
		Energy consumption during freezing: N/A
Comments:	Unit uses Sure Chill® technology; holdover time has been carried out while not fully charged; Net volume 128L with all shelves and 150L if used with only one shelf	
Accessories:	3 shelves; liquid PCM to mix with water. Optional: extra shelves, drawers, plywood packaging, 2 padlocks	
Spare parts (ref, price):	External solar thermometer, IMP60: 35.00USD Compressor, IMPC20: 166.00USD Condenser and fan, IMP65: 196.00USD Electronic controller (thermostat), IMP70: 84.00USD	
Shipping volume:	1.22m3	Shipping weight: 116 kg
Price year	2016	Incoterms EXW
Price	1-49 units: 2429 USD	50-99 units: 2368 USD 100 and more: 2308 USD
Quality standard:	- ISO 9001:2008 -	Specification ref.
Verification report:	101568371MKS-001	Verification laboratory: Intertek UK
Current PQS status:	<i>pre-qualified: 01 Sep 2014</i>	Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/045
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	TCW 3043 SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	91 X 127 X 78
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	89	Gross volume (Liters):	N/A
Gross volume (Liters):	111	Waterpack freezing capacity:	0
		Waterpack storage capacity:	0
Autonomy as per WHO/PQS protocols	116 hours 41 min	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable; Generator 3 = ground packed casing.
Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems

Comments:

Accessories: 5 baskets; 33 waterpacks 0.6 L; 2 keys; documentation

Spare parts (ref, price):
Compressor: 296.9702.09: 120.63 €
E Box: 296.9705.24: 120.63 €
Electronic thermostat: 292.2009.05: 116.80 €
Sensor for e-thermostat: 296.9804.20: 8.81 €
Electronic control panel: 296.3602.83: 7.47 €
Fan compressor; 292.9960.06: 72,76 €
Main switch: 292.2044.18: 8.42 €

Shipping volume:	1.07 m3	Shipping weight:	169 kg
Price year	2016	Incoterms	EXW
Price	1-39 units G1:5626€; G2: 6110€	40-99 units G1: 5359€; G2: 5829€	>100 units G1: 5103€; G2: 5542€
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -		
Verification report:	WHO 13-026 V2	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 01 Sep 2014</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/046
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	GVR 50 AC (Sure Chill®)
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances./medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	122 x 79.5 x 75
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	46.5		
Gross volume (Litres):	57.7	Gross volume:	N/A
Holdover time (hours):	182	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.56	Waterpack storage capacity:	N/A
Energy consumption, cool down test (kWh/24 hours):	0.64	Energy consumption during freezing:	N/A

- (i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK)
(ii) Refrigerator operates on only 2.5 hrs/day power at 43°C ambient, post stabilization
(iii) Has a built in intelligent temperature control, early warning and energy management system
(iv) Unit requires addition of clean drinking water during installation, contact manufacturer for information

Comments:

Accessories:	Included in price: 4 wire shelves ; 1 Padlock; 1 Funnel Optional (charged extra): Extra wire shelves, plywood packaging, Voltage Stabilizer		
Spare parts (ref, price):	Compressor i8 50L TR AC; RCM97749257: 57.00USD Fan MTR 50L TR100L TRAC; RFN97749259: 12.00USD Fan IMPELLER; RFM97749278: 1.50USD Voltage Stabilizer; RCM97749357: 25.00USD ELEC CNTRL CARD; RCC97749260: 30.00USD		
Shipping volume:	0.916	Shipping weight:	125
Price year	2016	Incoterms	EXW
Price	1500USD per unit	1470USD per unit, 10 to 99 units	1425USD per unit, 100 and more units
Quality standard:	- ISO 9001:2008 -		Specification ref.
Verification report:	CE-JOB-DEL-14-000503-GVR50AC	Verification laboratory:	Intertek India
Current PQS status:	<i>pre-qualified: 22 Dec 2014</i>		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/047
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	GVR 100 AC (Sure Chill®)
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances.com/medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	182 x 79.5 x 75
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR**FREEZER****Freeze protection: Grade A**

Vaccine storage capacity: (Litres)	99		
Gross volume (Litres):	121	Gross volume:	N/A
Holdover time (hours):	300.3	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.75		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	1.90	Energy consumption during freezing:	N/A

- (i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK)
(ii) Refrigerator operates on only 2.5 hrs/day power at 43°C ambient, post stabilization
(iii) Has a built in intelligent temperature control, early warning and energy management system
(iv) Unit requires addition of clean drinking water during installation, contact manufacturer for information

Comments:

Accessories:	Included in price: 4 wire shelves ; 1 Padlock; 1 Funnel Optional (charged extra): Extra wire shelves, plywood packaging, Voltage Stabilizer		
Spare parts (ref, price):	Compressor i11 100TR AC; RCM97749256:57.00USD Fan MTR 50LTR 100LTRAC; RFN97749259: 12.00USD Fan IMPELLER; RFM97749278:1.50USD Voltage Stabilizer; RCM97749357: 25.00USD Elec.CNTRL Card 50LTR100LTRAC; RCC97749260:30.00USD		
Shipping volume:	1.3	Shipping weight:	160
Price year	2016	Incoterms	EXW
Price	2300USD per unit	2250USD per 10 units	2150 per 100 units
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	CE-JOB-DEL-14-000503-GVR100AC	Verification laboratory:	Intertek India
Current PQS status:	<i>pre-qualified: 22 Dec 2014</i>		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003:

Refrigerators and freezers

PQS code:	E003/048
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	VC150SDD
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C; +32°C	Ext dimensions (HxLxD)	99.2 x 128.3 x 73.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	102	Gross volume (Liters):	42.9
Gross volume (Liters):	158.1	Waterpack freezing capacity:	2.04
		Waterpack storage capacity:	8.1 kg
Autonomy as per WHO/PQS protocols	77.99	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Main performance 32°C: Cool down, 120 hours, 0.72kWh/day; Stable running: 0.72kWh/day; Waterpacks freezing: 2.4kg, 0.81kWh/24h; Waterpacks storage: 12kg; Autonomy: 118.9 hours; Holdover: 122.5hours Photovoltaic array: >24Vdc and <45Vdc Incorporates Freeze Free technology Price includes a plug and play roof mounted adjustable 600W solar array		
Accessories:	Handle with in built lock, stacking baskets: 37.0 x 30.5 x 21.5cm = 17L; external temperature display, instruction manual.		
Spare parts (ref, price):	Compressor Danfoss BD35K: €178.00 - controller Danfoss 101N0410: €140.00 SDD controller: €191.00 - Temperature probe: €12.70 (per pair) MCB fridge / isolation switch: €19.05 - MCB freezer (isolation switch): €12.69 Solar thermometer: €38.10 - Freezer foam lid: €38.10 - Freezer fan: €24.00		
Shipping volume:	1.2m3	Shipping weight:	171kg
Price year	2016	Incoterms	FCA
Price	5600 € per unit including solar system		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-14-148	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 06 Jan 2015	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/049
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	GVR 50DC SDD
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances.com/medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	121.5 X 79.5 X 75
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	46.5	Gross volume (Liters):	N/A
Gross volume (Liters):	59.6	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	134.8	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	(i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK) (ii) Has a built in intelligent temperature control, early warning and energy management system (iii) Unit requires addition of clean drinking water during installation, contact manufacturer for information (iv) Price includes solar array (2 x 235 Wp, 24V solar panels) and 'plug & play' system/structure		
Accessories:	Included in price: 2 wire shelves, 1 Padlock, 1 Funnel (for installation) Optional (charged extra): Extra wire shelves, Plywood Packing		
Spare parts (ref, price):	Compressor & Controller :RCM9774923; 280\$ Fan :RFN97749232; 8 \$ (Including Impeller) Condenser :RFN97749232; 55 \$ Electronic control Card: RCC97749237; 45\$		
Shipping volume:	0.9m3 ref + 0.4m3 ss	Shipping weight:	125kg ref + 115kg ss
Price year	2016	Incoterms	EXW
Price	3450 USD per unit, including solar system	3400 USD per unit: 10 to 99 units with solar sytem	3325 USD per unit: 100 and more with solar system
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	CE-JOB-DEL-14-000503-GVR50DC	Verification laboratory:	Intertek UK
Current PQS status:	pre-qualified: 06 May 2015		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/050
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	GVR 100 DC (SureChill®)
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances.com/medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	182 x 79.5 x 75 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	99	Gross volume (Liters):	N/A
Gross volume (Liters):	121	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	175.95	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

- (i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK)
- (ii) Has a built in intelligent temperature control, early warning and energy management system
- (iii) Unit requires addition of clean drinking water during installation, contact manufacturer for information
- (iv) Price includes solar array (2 x 235 Wp, 24V solar panels) and 'plug & play' system/structure

Comments:

Accessories:	Included in price: 4 wire shelves, 1 Padlock, 1 Funnel (for installation) Optional (charged extra): Extra wire shelves, Plywood Packing		
Spare parts (ref, price):	Compressor & Controller :RCM9774923; 280\$ Fan :RFN97749232; 8 \$ (Including Impeller) Condenser :RFN97749232; 55 \$ Electronic control Card: RCC97749237; 45\$		
Shipping volume:	1.3m3 ref + 0.4m3 ss	Shipping weight:	160kg ref + 115kg ss
Price year	2016	Incoterms	EXW
Price	4815 USD with including solar system	4710 USD for 10 to 99 units with solar system	4615 USD for 100 units or more with solar system
Quality standard:	- ISO 9001:2008 - Specification ref.		
Verification report:	CE-JOB-DEL-14-000503-GVR 100 DC	Verification laboratory:	Intertek India

Current PQS status: pre-qualified: 07 May 2015 **Validity until:** May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/051
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	ZLF30 AC
Manufactured in:	South Africa
Company:	Zero Appliances (Pty) Ltd
Address:	P.O. Box 426 Edenvale 1610 Gauteng Province South Africa
Telephone:	(010) 207 1600
Email:	gareth@zeroappliances.co.za ; enquiries@zeroappliances.co.za
Web address:	www.zeroappliances.co.za

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:		Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	102.8 x 61.9 x 56.3
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	27		
Gross volume (Litres):	30	Gross volume:	N/A
Holdover time (hours):	77.2	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	1.682		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	2.556	Energy consumption during freezing:	N/A

Comments:	Fitted with automatic voltage stabilised protector		
Accessories:	3 shelves; liquid PCM to mix with water Optional: Extra shelves; drawers; waterpacks; plywood packaging, 2 padlocks (There are 2 lockable latches per unit)		
Spare parts (ref, price):	External solar thermometer: IMP60; 35.00 USD Compressor: IMPC10; 166.00 USD Condenser and fan: IMP65; 196.00 USD Electronic controller (thermostat): IMP70; 84.00 USD		
Shipping volume:	0.372 m³	Shipping weight:	65 kg
Price year	2016	Incoterms	EXW
Price	1-49 units: 1,192 USD	50-99 units: 1,162 USD	100 or more units: 1,132 USD
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	101911483MKS-001	Verification laboratory:	Intertek UK
Current PQS status:	pre-qualified: 05 Jun 2015		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/052
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	ZLF 150 DC
Manufactured in:	South Africa
Company:	Zero Appliances (Pty) Ltd
Address:	P.O. Box 426 Edenvale 1610 Gauteng Province South Africa
Telephone:	(010) 207 1600
Email:	gareth@zeroappliances.co.za ; enquiries@zeroappliances.co.za
Web address:	www.zeroappliances.co.za

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	189 x 83 x 71
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	128	Gross volume (Liters):	N/A
Gross volume (Liters):	161	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	131 h 38 mins	At a solar radiation reference period of:	3.5 kWh/m2/day
Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.			
Comments:	Unit uses Sure Chill ® technology. Entire system is plug and play with MC4 (MIC) connectors, on board isolator and surge protector. The array frame is roof adjustable. Price does not include solar system: 1,350 USD;		
Accessories:	Additional shelves; Liquid to mix with water; Optional: extra shelves, drawers, waterpacks, plywood packaging, 2 padlocks		
Spare parts (ref, price):	Compressor IMPC Ø7: 257.00 USD Compressor Controller IMP 152: 164.00 USD Condenser IMP145: 53.00 USD Fan IMP 144: 33.00 USD Thermostat IMP 012: 92.00 USD 24V Surge Protector ELSP15: 110.00 USD		
Shipping volume:	1.22 m3	Shipping weight:	120 kg
Price year	2016	Incoterms	EXW
Price	1-49 units: 4,355 USD	50-99 units: 4,246 USD	100 or more units: 4,137 USD
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	101861736MKS-001	Verification laboratory:	Intertek UK
Current PQS status:	pre-qualified: 05 Jun 2015	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/053
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VLS 094 SDD Greenline
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	86.0 x 93.0 x 70.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	92	Gross volume (Liters):	N/A
Gross volume (Liters):	151	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	72.5 hours	At a solar radiation reference period of:	3.5 kWh/m ² /day
Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.			
Comments:	Energy requirements: 12V dc solar electric array. 360W radiation reference period 3.5 kWh/m ² /day. Starting load at 2000rpm 4.13A Prices include the solar panel kit of 4x90Wp, roof adjustable, plug & play		
Accessories:	Mandatory vaccine storage top- basket. Self regulating temperature control. Electronic temperature reading. Locking lid + keys. Manual in 6 languages. Plywood packing.		
Spare parts (ref, price):	Electronic temperature controller: 41,20€ Compressor, inclusive E-box: 245,00€		
Shipping volume:	0.83 m ³	Shipping weight:	108 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 3.264 €	100-199 units: 3.217 €	200 or more units: 3.170 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	101809330MKS-001 Issue 1	Verification laboratory:	Intertek UK
Current PQS status:	pre-qualified: 19 Jun 2015	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/054
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VLS 154 SDD Greenline
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.comWeb address: <http://vestfrostsolutions.com/>**Specifications**

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	86.0 x 127.0 x 70.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Liters)	170	Gross volume (Liters):	N/A	
Gross volume (Liters):	248	Waterpack freezing capacity:	N/A	
		Waterpack storage capacity:	N/A	
Autonomy as per WHO/PQS protocols	73.4 hours	At a solar radiation reference period of:	3.5 kWh/m2/day	

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Energy requirements: 12V dc solar electric array. 360W radiation reference period 3.5 kWh/m2/day. Starting load at 2000rpm 4.13A
Solar array not included- contact manufacturer.
Prices include the solar panel kit of 4x90Wp, roof adjustable, plug & play

Comments:

Accessories: Mandatory vaccine storage top- basket. Self regulating temperature control; Electronic temperature reading. Locking lid + keys; Manual in 6 languages; Plywood packing

Spare parts (ref, price): Electronic temperature controller: 41,20€
Compressor, inclusive E-box: 245,00€

Shipping volume: 0.83m3 **Shipping weight:** 108kg

Price year 2016 **Incoterms** FCA

Price 1-99 units: 4.103 € 100-199 units: 4044 € 200 or more units: 3.985 €

Quality standard: - ISO 9001:2008 - ISO 14001 **Specification ref.**
- DS/OHSAS 18001:2008 -

Verification report: 300-KLAB-15-115 **Verification laboratory:** Danish Technological Institute

Current PQS status: pre-qualified: 19 Jun 2015 **Validity until:** May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/055
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	ZLF 30DC SDD
Manufactured in:	South Africa
Company:	Zero Appliances (Pty) Ltd
Address:	P.O. Box 426 Edenvale 1610 Gauteng Province South Africa
Telephone:	(010) 207 1600
Email:	gareth@zeroappliances.co.za ; enquiries@zeroappliances.co.za
Web address:	www.zeroappliances.co.za

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	102.5 x 56 x 60 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	27 L	Gross volume (Liters):	n/a
Gross volume (Liters):	30 L	Waterpack freezing capacity:	n/a
		Waterpack storage capacity:	n/a
Autonomy as per WHO/PQS protocols	77h 03 mins	At a solar radiation reference period of:	3.5 kWh/m2/day
Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.			
Unit uses Sure Chill ® technology. Entire system is plug and play with MC4 (MIC) connectors, on board isolator and surge protector. The array frame is roof adjustable. Price does not include solar system: 900 USD			
Comments:			
Accessories:	Additional, Shelves, Liquid to dilute with water, Optional: extra shelves, drawers, waterpacks, plywood packaging, 1 padlock		
Spare parts (ref, price):	Compressor IMPC07: 257.00 USD Compressor controller IMP152: 164.00 USD Condenser IMP145: 53.00 USD Fan IMP144: 33.00 USD Thermostat IMP012: 92.00 USD 24V Surge protector ELSP15: 110.00 USD		
Shipping volume:	0.372 m3	Shipping weight:	65 KG
Price year	2016	Incoterms	EXW
Price	1-49 units: 2,064 USD	50-99 units: 2,013 USD	100 or more units: 1,961 USD
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-15-132	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 09 Sep 2015	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/056
Type of appliance:	Solar direct drive, ancillary battery refrigerator
Manufacturer's reference:	HTC-60H
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of

Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive with ancillary battery
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	78.8 x 65.4 x 87.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Litres)	21		
Gross volume (Litres):	60	Gross volume:	N/A
Holdover time (hours):	109 hours 21 min	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.776	Waterpack storage capacity:	N/A
Energy consumption, cool down test (kWh/24 hours):	0.671	Energy consumption during freezing:	N/A

Comments:	Prices include solar system		
Accessories:	Baskets Set of keys Instruction manual		
Spare parts (ref, price):	Thermostat Main switch Electric controller Fan DC 12V Compressor scope Rechargeable battery (12V 10Ah)		
Shipping volume:	0.7 m3	Shipping weight:	110 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 2600 USD	100-199 units: 2550 USD	>200 units: 2500 USD
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-15-226	Verification laboratory:	CHEARI

Current PQS status:	pre-qualified: 17 Sep 2015	Validity until:	May, 2018
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/057
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	HTCD-160
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	169.5 x 86.5 x 82.5
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	100L	Gross volume (Liters):	40L
Gross volume (Liters):	120L	Waterpack freezing capacity:	2.08 Kg/24h
		Waterpack storage capacity:	10.68 Kg
Autonomy as per WHO/PQS protocols	121 hrs 27 mins	At a solar radiation reference period of:	3.5 kWh/m2/day
Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.			
Comments:	Prices include solar system		
Accessories:	2 shelves; 2 padlocks; Instruction manual; Water injection device; Water preservative		
Spare parts (ref, price):	Main switch: 0274000354 - 15 USD Electric controller: 0274000352 - 70 USD Fan DC 24V: 0274000351 - 12 USD Compressor scope: 0274000118A- 180 USD Solar Display: 0274000357- 11 USD		
Shipping volume:	1.6 m3	Shipping weight:	186 Kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 6300 USD	100-199 units: 6200 USD	>200 units: 6100 USD
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-15-227	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 17 Sep 2015	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003:

Refrigerators and freezers

PQS code:	E003/058
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	Dulas VC110SDD
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	95.9 x 128.2 x 74.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	110L	Gross volume (Liters):	N/A
Gross volume (Liters):	205L	Waterpack freezing capacity:	
		Waterpack storage capacity:	
Autonomy as per WHO/PQS protocols	78h 09 mins	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Incorporates Freeze Free technology. Price includes plug and play roof mounted adjustable 400W solar array		
Accessories:	Handle with in built lock; external temperature display; instruction manual; Baskets: 47.0 x 30.5 x 21.5 cm = 22L		
Spare parts (ref, price):	Compressor Danfoss BD35K: €178.00 - Controller Danfoss 101N0410: €140.00 SDD controller: €191.00 - Solar thermometer: €38.10 - MCB fridge / isolation switch: €19.05 Temperature probe: € 5.00		
Shipping volume:	1.2 m3	Shipping weight:	129 Kg
Price year	2016	Incoterms	FCA
Price	from €3700 includes solar system		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-13-194-3	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 18 Sep 2015		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003:

Refrigerators and freezers

PQS code:	E003/059
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VC88SDD
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	95.9 x 128.2 x 74.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	88L	Gross volume (Liters):	N/A
Gross volume (Liters):	205L	Waterpack freezing capacity:	
		Waterpack storage capacity:	
Autonomy as per WHO/PQS protocols	78h 09 mins	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Incorporates Freeze Free technology. Price includes plug and play roof mounted adjustable 400W solar array		
Accessories:	Handle with in built lock; external temperature display; instruction manual; Baskets (4): 47.0 x 30.5 x 21.5 cm = 22L		
Spare parts (ref, price):	Compressor Danfoss BD35K: €178.00 - Controller Danfoss 101N0410: €140.00 SDD controller: €191.00 - Solar thermometer: €38.10 - MCB fridge / isolation switch: €19.05 Temperature probe: € 5.00		
Shipping volume:	1.2 m3	Shipping weight:	129 Kg
Price year	2016	Incoterms	FCA
Price	from €3600 per complete system		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-13-194-2	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 23 Sep 2015		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/060
Type of appliance:	Vaccine/waterpacks freezer
Manufacturer's reference:	DW-25W147
Manufactured in:	China; People's Republic of
Company:	AUCMA CO. Ltd.
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China
Telephone:	+86 532 88965799
Email:	info@aucma.com.cn
Web address:	http://www.aucma.com.cn

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	790x595x880 mm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: N/A
Vaccine storage capacity: (Litres)	96		
Gross volume (Litres):	N/A	Gross volume:	147L
Holdover time (hours):	6hr 44mins	Waterpack freezing capacity:	14.5kg/24h
Energy consumption, stable running (kWh/24 hours):	3.31kWh/24h		19.4kg
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	2.81kWh/24h	Energy consumption during freezing:	Not done

Comments:

Accessories:

Spare parts (ref, price):	Dry filter (1); Compressor parts (1); process pipe (1); wire pressing block (1); screw M5X10 (1); Nut M5 (1); Washer 5 (1); Nameplate circuit diagram (1); self tapping screws ST4.8X16-C-H (1); compressor chamber cover (1); self tapping screws ST4.0X14 (1)
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Shipping volume:	0.41m3	Shipping weight:	45kg
Price year	2016	Incoterms	EXW
Price	1-99 units, USD 450	100-199 units, USD 430	>200 units, USD 400
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	WB-14-039	Verification laboratory:	CHEARI

Current PQS status:	pre-qualified: 02 Nov 2015	Validity until:	May, 2018
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/061
Type of appliance:	Vaccine/waterpacks freezer
Manufacturer's reference:	DW-25W300
Manufactured in:	China; People's Republic of
Company:	AUCMA CO. Ltd.
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China
Telephone:	+86 532 88965799
Email:	info@aucma.com.cn
Web address:	http://www.aucma.com.cn

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	1226x790x945 mm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: N/A
Vaccine storage capacity: (Litres)	240L		
Gross volume (Litres):		Gross volume:	300L
Holdover time (hours):	58hr 36Mins	Waterpack freezing capacity:	38.3kg/24h
Energy consumption, stable running (kWh/24 hours):	3.37kWh/24h		44.3kg
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	3.54kWh/24h	Energy consumption during freezing:	

Comments:

Accessories:

Spare parts (ref, price):	Dry filter (1); Compressor parts (1); process pipe (1); wire pressing block (1); screw M5X10 (1); Nut M5 (1); Washer 5 (1); Nameplate circuit diagram (1); self tapping screws ST4.8X16-C-H (1); compressor chamber cover (1); self tapping screws ST4.0X14 (1)
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Shipping volume:	0.92 m3	Shipping weight:	75kg
Price year	2016	Incoterms	
Price	1-99 units, USD 540	100-199 units, USD 520	>200 units, USD 490
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	WB-14-041	Verification laboratory:	CHEARI

Current PQS status:	<i>pre-qualified: 02 Nov 2015</i>	Validity until:	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/062
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VLS 200A Green Line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:		Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	85 x 73 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	60L	
Gross volume (Litres):	113L	Gross volume: N/A
Holdover time (hours):	54	Waterpack freezing capacity: N/A
Energy consumption, stable running (kWh/24 hours):	0.57	N/A
Energy consumption, cool down test (kWh/24 hours):	0.58	Waterpack storage capacity:
		Energy consumption during freezing: N/A
Comments:	New version of VLS200 upgraded for freeze protection Appliance requires only 4 hours electricity per 24 hours at +43°C	
Accessories:	3 vaccine storage baskets. Self regulating temperature control. Electronic temperature reading. Locking lid + keys. Manual in 6 languages, Plywood packing.	
Spare parts (ref, price):	Thermostat Danfoss 7020276; 22.60€ Compressor Secop 8-036038297; 101.20€	
Shipping volume:	0.58m3	Shipping weight: 70kg
Price year	2016	Incoterms FCA
Price	1-99 units: 709 €	100-199 units: 699 € 200 or more units: 689 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -	Specification ref.
Verification report:	BOM No: 1-n113	Verification laboratory: Danish Technological Institute
Current PQS status:	<i>pre-qualified: 08 Mar 2016</i>	Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/063
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VLS 300A Green Line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	85 x 92 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Litres)	98			
Gross volume (Litres):	157	Gross volume:	N/A	
Holdover time (hours):	55.5 hours	Waterpack freezing capacity:	N/A	
Energy consumption, stable running (kWh/24 hours):	0.60 kWh/24h		N/A	
		Waterpack storage capacity:		
Energy consumption, cool down test (kWh/24 hours):	0.69 kWh/24h	Energy consumption during freezing:	N/A	
Comments:	New version of VLS300 upgraded for freeze protection			
Accessories:	5 vaccine storage baskets. self-regulating temperature control; electronic temperature reading; Locking lid + keys; Manual in 6 languages; Plywood packing			
Spare parts (ref, price):	Thermostat, Danfoss 7020276; 22.60€ Compressor, Secop 8-036038297; 101.20€			
Shipping volume:	0.75 m3	Shipping weight:	93 kg	
Price year	2016	Incoterms	FCA	
Price	1-99 units: 862 €	100-199 units: 850 €	200 or more units: 838 €	
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		Specification ref.	
Verification report:	12057110OMKS-002a amended	Verification laboratory:	Intertek UK	
Current PQS status:	pre-qualified: 08 Mar 2016		Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/064
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VLS 350A Green Line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	85 x 113 x 70 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Litres)	127 L in baskets		
Gross volume (Litres):	209 L	Gross volume:	N/A
Holdover time (hours):	54.7 hours	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.62kWh/24h		N/A
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	0.64 kWh/24h	Energy consumption during freezing:	N/A
Comments:	New version of the VLS 350 for freeze-protection; This appliance requires only 4 hours electricity per 24 hours at +43°C		
Accessories:	7 vaccine storage baskets; self-regulating temperature control; electronic temperature reading; locking lid + keys; manual in 6 languages; plywood packing.		
Spare parts (ref, price):	Thermostat Danfoss 7020276; 22.60€ Compressor Secop 8-036038255; 108.78€		
Shipping volume:	0.85 m3	Shipping weight:	110 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 964 €	100-199 units: 950 €	200 or more units: 937 €
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 - DS/OHSAS 18001:2008 -	Specification ref.	
Verification report:	12057110OMKS-003a amended	Verification laboratory:	Intertek UK
Current PQS status:	<i>pre-qualified: 08 Mar 2016</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/065
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VLS 400A Greenline
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	86.0 X 127.0 X 70.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Litres)	145		
Gross volume (Litres):	235	Gross volume:	
Holdover time (hours):	55 hours	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.67		N/A
Energy consumption, cool down test (kWh/24 hours):	0.69	Waterpack storage capacity:	
		Energy consumption during freezing:	N/A
Comments:	New version of VLS400 upgraded for freeze protection Appliance requires only 4 hours electricity per 24 hours at +43°C		
Accessories:	7 vaccine storage baskets; self-regulating temperature control; external electronic temperature reading; locking lid + keys; manuals; plywood packing		
Spare parts (ref, price):	Thermostat Danfoss; 7020276; 22.60€ Compressor Secop 8-036038255; 108.78€		
Shipping volume:	1.02 m3	Shipping weight:	126 Kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 1045 €	100-199 units: 1030 €	200 or more units: 1016 €
Quality standard:	- ISO 9001:2008 - ISO 14001 - DS/OHSAS 18001:2008 -		Specification ref.
Verification report:	A66543 - amended	Verification laboratory:	Intertek UK
Current PQS status:	<i>pre-qualified: 08 Mar 2016</i>		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/066
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	TCW 4000 AC
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	91.5 x 162.5 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR

FREEZER

Freeze protection: Grade A

Vaccine storage capacity: 240
(Litres)

Gross volume (Litres): 249

Holdover time (hours): 77.3 hours

Energy consumption, stable running (kWh/24 hours): 0.85

Energy consumption, cool down test (kWh/24 hours): 1.24

Gross volume: N/A

Waterpack freezing capacity: N/A

Waterpack storage capacity: N/A

Energy consumption during freezing: N/A

Comments: Shipped upon request with the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS position through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no proper display since the refrigerators do have digital display. This RTM device is exclusively bundled to B Medical Systems refrigerators / freezers. For more information, please contact B Medical Systems.			
Accessories:		6 baskets; 2 keys; 1 brush; 2 spacers; documentation	
Spare parts (ref, price):		Compressor: 296.9701.63: 164,69 € Controller board: 296.9769.93: 143,39 € Sensor cooler: 296.9804.48: 15,64 € Fan compressor: 292.9960.06: 66,05 € Main switch: 292.2044.20: 7,67 € Display board: 296.9769.81: 38,39 € Switching power supply: 32,37 €	
Shipping volume:	0,88 m3	Shipping weight:	174 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: 3307 €	40-99 units: 3141 €	> 100 units: 2984 €
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -		Specification ref.
Verification report:	WHO 15-034 corr 2	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 08 Mar 2016</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/067
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	TCW 15R SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	95.0 x 73.0 x 73.0
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	16 L	Gross volume (Liters):	N/A
Gross volume (Liters):	26.5 L	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	81.8	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable nominal 12 V DC solar electric array. Minimum power 250 watts at solar radiation reference period 3.5 kWh/m²/day

Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems

Comments:

Accessories: 2 baskets; 2 keys; 1 brush; 2 spacers; documentation

Spare parts (ref, price):

Compressor: 296.9702.09: 116,94 €
E Box: 296.9705.12: 104,96 €
Controller board: 296.9769.82: 138,28 €
Sensor cooler: 296.9804.73: 46,14 €
Sensor heater: 296.9804.72: 35,17 €
Fan compressor: 292.9960.06: 72,82 €
Main switch: 292.2044.11: 2,76 €
Display board: 296.9769.81: 38,32 €

Shipping volume:	0,65 m3	Shipping weight:	85 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: G1: 3969 €; G2: 4244 €	40-99 units: G1: 3771 €; G2: 4032 €	> 100 units: G1: 3582 €; G2: 3830 €
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WHO-16-002	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 25 May 2016</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/068
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	TCW 40R SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	90 x 103 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	36	Gross volume (Liters):	N/A
Gross volume (Liters):	46.6	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	81 hours 54 min	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

<p>This appliance is a modified model of E003/042; nominal 12 V DC solar electric array: Minimum power 250 watts at solar radiation reference period 3.5 kWh/m2/day Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems</p>			
Comments:			
Accessories:	1 basket; 2 keys; 1 brush; 1 pan for drain; documentation		
Spare parts (ref, price):	<p>Compressor: 296.9702.09: 116,94 € E Box: 296.9705.24: 114,99 € Controller board: 296.9769.82: 138,28 € Sensor cooler: 296.9804.73: 46,14 € Sensor heater: 296.9804.72: 35,17 € Fan compressor: 292.9960.06: 72,82 € Main switch: 292.2044.11: 2,76 € £ Display board: 296.9769.81: 38,32 €</p>		
Shipping volume:	0.88m3	Shipping weight:	120kg
Price year	2016	Incoterms	EXW
Price	1-39 units: G1: 4532 €; G2: 4840 €	40-99 units: G1:4305 €; G2: 4597 €	> 100 units: G1: 4091 €; G2: 4368
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WHO-13-024	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 16 Mar 2016</i>	Validity until: <i>May, 2018</i>	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/069
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VLS 024 SDD Green Line
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark
Telephone:	+45 7914 2555; +45 7914 2248
Email:	clc@vestfrostsolutions.com ; bjn@vestfrostsolutions.com
Web address:	http://vestfrostsolutions.com/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	83.0 x55.5 x 64.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Liters)	25.5	Gross volume (Liters):	N/A	
Gross volume (Liters):	36	Waterpack freezing capacity:	N/A	
		Waterpack storage capacity:	N/A	
Autonomy as per WHO/PQS protocols	81.7 hours	At a solar radiation reference period of:	3.5 kWh/m2/day	

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Energy requirements: 12V DC solar electric array. 360W radiation reference period 3.5kWh/m2/day. Starting load at 2000RPM 4,13A Prices include the solar panel kit of 4x90Wp, roof adjustable, plug & play.		
Accessories:	Mandatory vaccine storage top- basket. Self regulating temperature control. Electronic temperature reading. Locking lid + keys. Manual in 6 languages. Plywood packing.		
Spare parts (ref, price):	Electronic temperature controller: 7020274 41,20€ Compressor, inclusive E-box : 8-036510214 245,00€		
Shipping volume:	0,63 m3	Shipping weight:	75 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 2635 €	100-199 units:2598 €	200 or more units: 2560 €
Quality standard:	- ISO 9001:2008 - ISO 14001	Specification ref.	
Verification report:	300-KLAB-15-174	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 08 Apr 2016		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/070
Type of appliance:	Combined icelined refrigerator/waterpacks freezer
Manufacturer's reference:	VLS 064 RF
Manufactured in:	Denmark
Company:	Vestfrost Solutions
Address:	A/S Vestfrost Falkevej 12 DK-6705 Esbjerg Ø Denmark

Telephone: +45 7914 2555; +45 7914 2248

Email: clc@vestfrostsolutions.com;
bjn@vestfrostsolutions.comWeb address: <http://vestfrostsolutions.com/>**Specifications**

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	84.5 x 72.5x 71.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR**FREEZER****Freeze protection: Grade A**

Vaccine storage capacity: (Litres)	52.5L		
Gross volume (Litres):	75L	Gross volume:	5.1L
Holdover time (hours):	20.2	Waterpack freezing capacity:	1.6Kg
Energy consumption, stable running (kWh/24 hours):	1.50		6 x 0.6L
		Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	1.51	Energy consumption during freezing:	1.80

Comments:

Accessories:	Mandatory vaccine storage top- basket. Self regulating temperature control. Electronic temperature reading. 6 water-packs. Locking lid + keys. Manual in 6 languages. Plywood packing.
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Spare parts (ref, price):	Thermostat: 7095034; 40,58€ Compressor: 8-036038987; 120,59€
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Shipping volume:	0,58 m3	Shipping weight:	98 kg
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Price year	2016	Incoterms	FCA
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Price	1-99 units: 1104 €	100-199 units: 1090 €	200 or more units: 1075 €
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Quality standard:	- ISO 9001:2008 - ISO 14001	Specification ref.	
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Verification report:	300-KLAB-15-181	Verification laboratory:	Danish Technological Institute
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Current PQS status:	<i>pre-qualified: 08 Apr 2016</i>	Validity until:	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/071
Type of appliance:	Waterpacks freezer
Manufacturer's reference:	TFW 3000 AC
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	
Refrigerant:	#R290	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	91.0 x 127.0 x 78.0
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR

FREEZER

Freeze protection: N/A

Vaccine storage capacity: (Litres)	N/A
Gross volume (Litres):	N/A
Holdover time (hours):	
Energy consumption, stable running (kWh/24 hours):	2.15
Energy consumption, cool down test (kWh/24 hours):	2.20

Gross volume:	204 L
Waterpack freezing capacity:	54 x 0.6L - 32kg/24h 162 x 0.6 L
Waterpack storage capacity:	
Energy consumption during freezing:	

<p>This appliance is a waterpacks fast freezer - it uses propane as a coolant. Shipped upon request with the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS position through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no proper display since the refrigerators do have digital display. This RTM device is exclusively bundled to B Medical Systems refrigerators / freezers. For more information, please contact B Medical Systems</p>			
Comments:			
Accessories:	6 baskets; 54 waterpacks 0.6 L; 2 keys; 1 brush; 2 spacers, documentation		
Spare parts (ref, price):	Compressor: 296.9701.72: 179,09 € Controller board: 296.9769.95: 139,09 € Sensor cooler: 296.9804.48: 15,64 € Fan compressor: 296.9759.51: 31,67 € Main switch: 292.2044.20: 7,67 € Display board: 296.9769.81: 38,39 € Switch power supply: 294.2943.75: 87,03 €		
Shipping volume:	1,07 m3	Shipping weight:	126 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: 2789 €	40-99 units: 2649 €	> 100 units: 2517 €
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WHO 16-001	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 25 May 2016</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/072
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	VC225ILR
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	98.6 x 128.7 x 74.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	184 L	
Gross volume (Litres):	203 L	Gross volume: N/A
Holdover time (hours):	94	Waterpack freezing capacity: N/A
Energy consumption, stable running (kWh/24 hours):	0.803	N/A
Energy consumption, cool down test (kWh/24 hours):	0.764	Waterpack storage capacity:
		Energy consumption during freezing: N/A

Comments:	Include external voltage regulator		
Accessories:	Include external voltage regulator		
Spare parts (ref, price):	Dulas PS-ILR-001 power supply unit: €260.00 Compressor Danfoss BD35K: €178.00 Controller Danfoss 101N0410: €140.00 Dulas refrigerator controller: €191.00 Temperature probe: €12.70 (per pair) Solar thermometer: €38.10 MCB fridge/Isolation switch: €19.05		
Shipping volume:	1.29 m3	Shipping weight:	172 kg
Price year	2016	Incoterms	FCA
Price	€2600 per unit		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-16-110	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 25 May 2016		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/073
Type of appliance:	Solar direct drive freezer
Manufacturer's reference:	TFW 40 SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsistemas.com
Web address:	www.bmedicalsistemas.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	N/A
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	90 x 103 x 78 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: N/A
Vaccine storage capacity: (Liters)	N/A	Gross volume (Liters):	64 L
Gross volume (Liters):	N/A	Waterpack freezing capacity:	2.16 kg/24h (4 packs of 0.6L)
		Waterpack storage capacity:	11.24 kg (20 waterpacks)
Autonomy as per WHO/PQS protocols	5 days	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable
 Energy sources: nominal 12 V DC solar electric array. Minimum power 250 watts at solar radiation reference period 3.5 kWh/m²/day
 Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems

Comments:**Accessories:**

8 waterpacks 0.6 L; 8 waterpacks holders; 2 keys; 1 brush; 2 spacers; documentation

Spare parts (ref, price):

Compressor: 296.9702.09: 116,19 €
 E Box: 296.9705.24: 114,32 €
 Controller board: 296.9769.92: 141,97 €
 Sensor cooler: 296.9804.48: 15,64 €
 Fan compressor: 292.9960.06: 66,05 €
 Main switch: 292.2044.11: 2,73 €
 Display board: 296.9769.81: 38,39 €

Shipping volume:	0,88 m3	Shipping weight:	119 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: G1: 4798 €; G2: 5279 €	40-99 units: G1: 4569 €; G2: 5030 €	> 100 units: G1: 4351 €; G2: 4791 €
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WHO-15036 corr 1	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 26 May 2016</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/074
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	HTCD 90 SDD
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of

Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	112 x 65.4 x 87.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A

Vaccine storage capacity: (Liters)	37.5	Gross volume (Liters):	32
Gross volume (Liters):	58	Waterpack freezing capacity:	2.08 Kg/24h
		Waterpack storage capacity:	12
Autonomy as per WHO/PQS protocols	114.9	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Voltage of Solar Panel 24V; Power of Solar Panel 180W *4		
Accessories:	Baskets; manuals; keys		
Spare parts (ref, price):	Main switch: 274000354; USD 12.00 Electric controller: 274000352; USD 45.00 Fan: 274000351; USD 8.00 Compressor scope: 0274000118A; USD 230.00 Solar Display: 274000357; USD 8.00		
Shipping volume:	0.98 m3	Shipping weight:	108 kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 4500 USD	100-199 units: 4450 USD	>200 units: 4400 USD
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-16-153	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 06 Jun 2016		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/075
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	HTC 40 SDD
Manufactured in:	
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	78.8×65.4×87.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	22.5	Gross volume (Liters):	N/A
Gross volume (Liters):	40	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	117	At a solar radiation reference period of:	3.5 kWh/m2/day
Warning ! For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.			
Comments: Prices include solar system; 24V solar Panel; 180W *2 Solar Panel power			
Accessories: 2 baskets; manuals; keys			
Spare parts (ref, price): Main switch: 274000354; USD 12.00 Electric controller: 274000352; USD 45.00 Fan: 274000351; USD 8.00 Compressor SECOP: 0274000118A; USD 230.00 Solar Display: 274000357; USD 8.00			
Shipping volume:	0.70m3	Shipping weight:	75Kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 2700 USD	100 - 199 units: 2650 USD	>200 units: 2600 USD
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-16-151	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 06 Jun 2016	Validity until: May, 2018	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/076
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	HTC 110 SDD
Manufactured in:	
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	78.8 × 65.4 × 112.8 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Liters)	59	Gross volume (Liters):	N/A
Gross volume (Liters):	110	Waterpack freezing capacity:	N/A
		Waterpack storage capacity:	N/A
Autonomy as per WHO/PQS protocols	96	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Prices include solar system; 24V Solar Panel s, Power of Solar Panel 180W *2		
Accessories:	4 baskets; manuals; keys		
Spare parts (ref, price):	Main switch: 274000354; USD 12.00 Electric controller: 274000352; USD 45.00 Fan: 274000351; USD 8.00 Compressor SECOP: 0274000118A; USD 230.00 Solar Display: 274000357; USD 8.00		
Shipping volume:	0.98m3	Shipping weight:	94Kg
Price year	2016	Incoterms	FCA
Price	1-99 units: 3000 USD	100-199 units: 2950 USD	>200 units: 2900 USD
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-16-152	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 06 Jun 2016	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/077
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	TCW15 SDD
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	95x73x73cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	16 Litres	Gross volume (Liters):	2.4 Litres
Gross volume (Liters):	26.5 Litres	Waterpack freezing capacity:	1.97 kg
		Waterpack storage capacity:	4 x 0.6L waterpacks
Autonomy as per WHO/PQS protocols	84 hours	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Prices include the solar system: Generator 1 = roof fixed; Generator 2 = roof adjustable
Include free of charge the B Medical Systems RTM datalogger, including 10 years of worldwide communication, real time alarm service for temperature and open door events through SMS/Email, GPS positioning through Google Maps, access to the webserver, performance monitoring and compliant to WHO PQS E006/TR03.2 with one deviation as this data logger has no integrated display however the refrigerators all have digital display. This RTM device is exclusively bundled to B Medical Systems SDD refrigerators / freezers. For more information, please contact B Medical Systems

Comments:**Accessories:**

2 baskets; 4 water-packs 0.6 L; 4 water-pack holders; 2 keys; 1 brush; 2 spacers; documentation

Spare parts (ref, price):

Compressor: 296.9702.09: 116,19 €
E Box: 296.9705.12: 104,96 €
Controller board: 296.9769.82: 138,27 €
Sensor cooler: 296.9804.73: 41,54 €
Sensor heater: 296.9804.72: 34,99 €
Fan compressor: 292.9960.06: 66,05 €
Main switch: 292.2044.11: 2,73 €
Display board: 296.9769.81: 38,39 €

Shipping volume:	0.65 m3	Shipping weight:	87 kg
Price year	2016	Incoterms	EXW
Price	1-39 units: G1: 4002 €; G2: 4277 €	40-99 units: G1: 3802 €; G2: 4063 €	> 100 units: G1: 3612 €; G2: 3860 €
Quality standard:	- ISO 9001:2008 - ISO 13485 - Other - ISO/TS 16949:2009 -		
Verification report:	WHO 16-014 and WHO 16-015	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified: 13 Sep 2016</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E003:

Refrigerators and freezers

PQS code:	E003/078
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VC50SDD
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	960mm x 1000mm x 740mm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	52.5 litres	Gross volume (Liters):	
Gross volume (Liters):	82 litres	Waterpack freezing capacity:	
		Waterpack storage capacity:	
Autonomy as per WHO/PQS protocols	74hrs 15mins	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Incorporates Freeze Free technology. Price includes plug and play roof mounted adjustable 200 Wp solar array

Comments:

Accessories: Handle with in-built lock; External temperature display; Instruction manual; Basket; replaceable lid gaskets

Spare parts (ref, price): "Compressor Danfoss BD35K: €178.00 - Controller Danfoss 101N0420: €140.00 Dulas SDD controller: €191.00 - Temperature probe: €12.70 (per pair) Solar thermometer: €38.10 - MCB fridge/Isolation switch: €19.05 - Lid gaskets: €45.00

Shipping volume:	1.02 m3	Shipping weight:	129 kg
Price year	2016	Incoterms	FCA
Price	From €2750 per complete system		
Quality standard:	- ISO 9001:2008 - ISO 14001	Specification ref.	-
Verification report:	300-KLAB-16-147	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 04 Oct 2016</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/079
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	CFD-50
Manufactured in:	China; People's Republic of
Company:	AUCMA CO. Ltd.
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China
Telephone:	+86 532 88965799
Email:	info@aucma.com.cn
Web address:	http://www.aucma.com.cn

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R134a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional; #2; #Electric Mains 115/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	158.8 x 54.5 x 65.5 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER		Freeze protection: Grade A
Vaccine storage capacity: (Litres)	50		
Gross volume (Litres):	68	Gross volume:	N/A
Holdover time (hours):	135	Waterpack freezing capacity:	N/A
Energy consumption, stable running (kWh/24 hours):	0.76	Waterpack storage capacity:	N/A
Energy consumption, cool down test (kWh/24 hours):	0.77	Energy consumption during freezing:	N/A
Comments:	Unit requires addition of 32 litres of clean drinking water during installation		
Accessories:	3 vaccine storage trays; 3 wire shelves; 2 sets of locks & keys; 1 funnel; documentation; voltage stabilizer included		
Spare parts (ref, price):	Compressor, 3000000353: \$108 DC fan, 3000001115: \$25		
Shipping volume:	0.77m3	Shipping weight:	100Kg
Price year	2016	Incoterms	EXW
Price	1 – 99 units: 1,400USD	100 or more units: 1,300USD	
Quality standard:	- ISO 9001:2008 - ISO 14001 - OHSAS 18001 -	Specification ref.	
Verification report:	WB-16-217	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified: 04 Nov 2016	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/080
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	GVR 51 LITE AC
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances./medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional;#2;#Electric Mains 115/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	62cm x 73.5cm x 151.5cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR

FREEZER

Freeze protection: Grade A

Vaccine storage capacity: (Litres)	51 Litres	Gross volume (Litres):	69 Litres
Holdover time (hours):	89 hours 43 mins	Waterpack freezing capacity:	
Energy consumption, stable running (kWh/24 hours):	1.63	Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	2.04	Energy consumption during freezing:	

Comments:

- (i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK)
- (ii) Has a built in intelligent temperature control, early warning and energy management system
- (iii) Unit requires addition of clean drinking water during installation, contact manufacturer for information

Accessories: "Included in price: 4 wire shelves ; 1 Padlock; 1 Funnel
Optional (charged extra): Extra wire shelves, plywood packaging, Voltage Stabilizer"

Spare parts (ref, price):

- Compressor
- Electronic Controller Card
- Voltage Stabilizer

Shipping volume:	0.86 m3	Shipping weight:	115 kg
Price year	2016	Incoterms	EXW
Price	USD 900	USD 880	USD 865
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	CE-JOB-DEL-16-000501-GVR 51 Lite	Verification laboratory:	Intertek India
Current PQS status:	<i>pre-qualified: 21 Nov 2016</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/081
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	GVR 75 Lite
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances./medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Electric Mains 115/60Hz;#1;#Electric Mains 220- 240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	151.5cm x 62cm x 73.5cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR

FREEZER

Freeze protection: Grade A

Vaccine storage capacity: (Litres)	72.5 litres
Gross volume (Litres):	99 litres
Holdover time (hours):	81 hrs
Energy consumption, stable running (kWh/24 hours):	1.47 kWh/24 h
Energy consumption, cool down test (kWh/24 hours):	2.77 kWh/24 h

Gross volume:	
Waterpack freezing capacity:	
Waterpack storage capacity:	
Energy consumption during freezing:	

- "(i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK) guarantees never to freeze vaccines
(ii) Data loggers records up to 30 days temperature reading with 5 customizable temperature alarm settings
(iii) Has a built in intelligent temperature control, early warning and energy management system
(iv) Unit requires addition of clean drinking water during installation,"

Comments:**Accessories:**

"Included in price: 4 wire shelves ; 1 Padlock; 1 Funnel
Optional (charged extra): Extra wire shelves, plywood packaging, Voltage Stabilizer"

Spare parts (ref, price):

Compressor
Electronic Controller Card
Voltage Stabilizer

Shipping volume:	0.86m3	Shipping weight:	115 Kg
Price year	2016	Incoterms	
Price	Price 1 (1-10 Units) - USD 972	Price 2 (10-99 Units) - USD 950	Price 3 (100+ Units) - USD 935
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	CE-JOB-DEL-16-000501-GVR 75 Lite	Verification laboratory:	Intertek India
Current PQS status:	<i>pre-qualified: 21 Nov 2016</i>	Validity until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/082
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	GVR 99 Lite
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances./medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Electric Mains 115/60Hz;#1;#Electric Mains 220- 240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	62.0 X 73.5 X 170.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR

FREEZER

Freeze protection: Grade A

Vaccine storage capacity: 98.5 L
(Litres)

Gross volume (Litres): 124 L

Holdover time (hours): 59 Hrs 34 minutes

Energy consumption, stable running (kWh/24 hours): 1.23 kWh/24 h

Energy consumption, cool down test (kWh/24 hours): 1.73 kWh/24 h

Gross volume:

Waterpack freezing capacity:

Waterpack storage capacity:

Energy consumption during freezing:

- "(i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK) guarantees never to freeze vaccines
(ii) Data loggers records up-to 30 days temperature reading with 5 customizable temperature alarm settings
(iii) Has a built in intelligent temperature control, early warning and energy management system
(iv) Unit requires addition of clean drinking water during installation,"

Comments:

Accessories:

"Included in price: 4 wire shelves ; 1 Padlock; 1 Funnel
Optional (charged extra): Extra wire shelves, plywood packaging, Voltage Stabilizer"

Spare parts (ref, price):

Compressor
Electronic Controller Card
Voltage Stabilizer

Shipping volume:	0.95m3	Shipping weight:	125 Kg
Price year	2016	Incoterms	
Price	Price 1 (1-10 Units) - USD 1050	Price 2 (10-99 Units) - USD 1030	Price 3 (100+ Units) - USD 1010
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	CE-JOB-DEL-16-000501-GVR 99 Lite	Verification laboratory:	Intertek India
Current PQS status:	<i>pre-qualified: 21 Nov 2016</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

**E003:****Refrigerators and freezers**

PQS code:	E003/083
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	GVR 225 AC
Manufactured in:	India
Company:	Godrej & Boyce MFG. Co. Ltd.
Address:	Plant 01, Pirojshanagar, Vikhroli West Mumbai 400 079 India
Telephone:	+91 22 67966201
Email:	medicalref@godrej.com ; hello@surechill.com
Web address:	http://www.godrejappliances./medical

Specifications

Climate zone:	Hot	Min rated ambient temp:	+10°C
Refrigerant:	R600a	Energy source:	Electric Mains 115/60Hz;#8;#Electric Mains 220-240V 50/60Hz or Electric Mains 115/60Hz optional
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	79.5 x 75.0 x 182.0 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	225 Litres	
Gross volume (Litres):	278 Litres	Gross volume:
Holdover time (hours):	55 hours	Waterpack freezing capacity:
Energy consumption, stable running (kWh/24 hours):	2.04 kWh/24 h	Waterpack storage capacity:
Energy consumption, cool down test (kWh/24 hours):	2.38 kWh/24 h	Energy consumption during freezing:
Comments:	"(i) Sure Chill is a patented technology licensed by The Sure Chill Company (UK) (ii) Refrigerator operates on only 2.5 hrs/day power at 37°C ambient, post stabilization (iii) Has a built in intelligent temperature control, early warning and energy management system (iv) Unit requires addition of clean drinking water during installation, contact manufacturer for information"	
Accessories:	"Included in price: 4 wire shelves ; 1 Padlock; 1 Funnel Optional (charged extra): Extra wire shelves, plywood packaging, Voltage Stabilizer"	
Spare parts (ref, price):	Compressor Fan Motor Electronic Controller Card Fan Impeller Voltage Stabilizer	
Shipping volume:	1.3 m3	Shipping weight: 160 kg
Price year	2016	Incoterms EXW
Price	Price 1 (1-10 Units) - USD 1800	Price 2 (10-99 Units) - USD 1765 Price 3 (100+ Units) - USD 1730
Quality standard:	- ISO 9001:2008 -	Specification ref.
Verification report:	CE-JOB-DEL-16-000501-GVR 225AC	Verification laboratory: Intertek India
Current PQS status:	pre-qualified: 21 Nov 2016	Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/084
Type of appliance:	Solar direct drive combined refrigerator/freezer
Manufacturer's reference:	VC60SDD-1
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	95.9cm x 128.2cm x 74.0cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	57 Litres	Gross volume (Liters):	24 Litres
Gross volume (Liters):	124 Litres	Waterpack freezing capacity:	2.4kg or 4x 0.6L packs
		Waterpack storage capacity:	13.8kg or 23 x 0.6L packs
Autonomy as per WHO/PQS protocols	82hrs 48 mins	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Incorporates Freeze Free technology. Price includes plug and play roof mounted adjustable 600 Wp solar array		
Accessories:	Handle with in-built lock; External temperature display; Instruction manual; Stacking baskets; replacable lid gaskets		
Spare parts (ref, price):	Compressor Danfoss BD35K: €178.00 - Controller Danfoss Compressor Danfoss BD35K: €178.00 - controller Danfoss 101N0410: €140.00 SDD controller: €191.00 - Temperature probe: €12.70 (per pair) MCB fridge / isolation switch: €19.05 - MCB freezer (isolation switch): €12.69 Solar thermometer: €38.10 - Freezer foam lid: €38.10 - Freezer fan: €24.00		
Shipping volume:	1.2 m3	Shipping weight:	170 kg
Price year	2016	Incoterms	FCA
Price	From €4750 per complete system		
Quality standard:	- ISO 9001:2008 -		Specification ref.
Verification report:	300-KLAB-16-164	Verification laboratory:	Danish Technological Institute
Current PQS status:	<i>pre-qualified: 16 Jan 2017</i>		Validity until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/085
Type of appliance:	Solar direct drive refrigerator
Manufacturer's reference:	VC30SDD
Manufactured in:	United Kingdom
Company:	Dulas Ltd
Address:	Dyfi Eco Parc Machynlleth Powys SY20 8AX United Kingdom
Telephone:	+ 44 (0)1654 705055
Email:	solar@dulas.org.uk
Web address:	http://www.dulassolar.org/

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	98.7cm x 89.0cm x 75.5cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR AND / OR FREEZER			Freeze protection: Grade A
Vaccine storage capacity: (Liters)	25.5l	Gross volume (Liters):	
Gross volume (Liters):	39l	Waterpack freezing capacity:	
		Waterpack storage capacity:	
Autonomy as per WHO/PQS protocols	72hrs 09mins	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:	Incorporates Freeze Free technology. Price includes plug and play roof mounted adjustable 260Wp solar array		
Accessories:	Handle with in-built lock; External temperature display; Instruction manual; Basket; replaceable lid gaskets		
Spare parts (ref, price):	Compressor Danfoss BD35K: €178.00 - Controller Danfoss 101N0420: €140.00 Dulas SDD-SC controller: €56.00 Temperature probe: €5.00 Solar thermometer: €38.10 - MCB fridge/Isolation switch: €19.05 - Lid gaskets: €45.00		
Shipping volume:	1.02 m3	Shipping weight:	129 kg
Price year	2017	Incoterms	FCA
Price	From €2500 per complete system		
Quality standard:	- ISO 9001:2008 -	Specification ref.	
Verification report:	300-KLAB-17-117	Verification laboratory:	Danish Technological Institute
Current PQS status:	pre-qualified: 01 Jun 2017	Validity until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/086
Type of appliance:	Solar direct drive freezer
Manufacturer's reference:	HTD-40
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	
Refrigerant:	R600a	Energy source:	Solar direct drive
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	78.8 × 65.4 × 87.5 mm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression
SOLAR DIRECT DRIVE REFRIGERATOR		AND / OR FREEZER	Freeze protection: Not tested
Vaccine storage capacity: (Liters)	N/A	Gross volume (Liters):	48 L
Gross volume (Liters):		Waterpack freezing capacity:	2.4kg/24h
		Waterpack storage capacity:	20 kg
Autonomy as per WHO/PQS protocols	120 hours	At a solar radiation reference period of:	3.5 kWh/m2/day

Warning !

For solar direct drive units, the correct sizing of the solar panel array for a specific site is complex and critical. It must be agreed with both the appliance manufacturer and with the Qualified Supplier of the solar energy system at the time of ordering.

Comments:

Accessories:

- 1.Instructions
- 2.Key
- 3.Handle component
- 4.Defrosting shovel
- 5.Waterpack holder
- 6.0.4L Water-pack

Spare parts (ref, price):

1. Solar display screen: 0274000357
2. Power switch: 0274000354
3. Electrolysis capacitor: 0274000393
4. Temperature controller: 0274000352
5. Dry Filter: 0074180001
6. Condenser: 0060702951A
7. Fan: 0274000351
8. Indicator light: 0074000574

Shipping volume:	0.70m3	Shipping weight:	65 Kg
Price year	2017	Incoterms	FCA
Price	1-20 Units - \$2900	21-100 Units - \$2800	>100 - \$2650

Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.
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Verification report:	WB-16-600	Verification laboratory:	CHEARI
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Current PQS status:	<i>pre-qualified: 09 Jun 2017</i>	Validity until:	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/087
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	HBC-260
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	165.0 x 65.4 x 78.8 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	211 Litres	
Gross volume (Litres):	260 Litres	Gross volume:
Holdover time (hours):	34 hrs 40 mins	Waterpack freezing capacity:
Energy consumption, stable running (kWh/24 hours):	1.62 kWh/24h	Waterpack storage capacity:
Energy consumption, cool down test (kWh/24 hours):	1.47 kWh/24h	Energy consumption during freezing:

Comments:

Accessories:	Accessory : 1. Instructions 2. Key 3. Handle component 4. Basket 5. Data logger		
Spare parts (ref, price):	Thermostat, Compressor, Basket up,; Basket down, Indicator lamp, Fan, Filter		
Shipping volume:	0.91m3	Shipping weight:	132KG
Price year	2017	Incoterms	
Price	1 - 20 Units: \$1050	21 - 100 Units: \$1030	>100 Units: \$990
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -		Specification ref.
Verification report:	WB-17-165	Verification laboratory:	CHEARI

Current PQS status: *pre-qualified: 09 Jun 2017*

Validity until: *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/088
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	HBC-150
Manufactured in:	
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:		Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	112.8 x 65.4 x 78.8 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR		FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	122 Litres		
Gross volume (Litres):	150 Litres	Gross volume:	
Holdover time (hours):	30 hrs 16 mins	Waterpack freezing capacity:	
Energy consumption, stable running (kWh/24 hours):	0.53kWh/24h	Waterpack storage capacity:	
Energy consumption, cool down test (kWh/24 hours):	0.61 kWh/24h	Energy consumption during freezing:	

Comments:

Accessories:	Accessory : 1. Instructions 2. Key 3. Handle component 4. Basket 5. Data logger		
Spare parts (ref, price):	Thermostat, Compressor, Basket up,; Basket down, Indicator lamp, Fan, Filter		
Shipping volume:	0.61m3	Shipping weight:	85kg
Price year	2017	Incoterms	
Price	1 - 20 Units: \$900	21 - 100 Units: \$870	>100 - \$840
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -		Specification ref.
Verification report:	Verification laboratory:		CHEARI
Current PQS status:	<i>pre-qualified: 09 Jun 2017</i>		Validity until: May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E003:

Refrigerators and freezers

PQS code:	E003/089
Type of appliance:	Icelined refrigerator
Manufacturer's reference:	HBC-80
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of
Telephone:	+86-532-88937169
Email:	wanggs@haier.com
Web address:	http://www.haiermedical.com

Specifications

Climate zone:	Hot	Min rated ambient temp:	+5°C
Refrigerant:	R600a	Energy source:	Electric Mains 220-240V 50/60Hz
Appliance tested at:	+43°C	Ext dimensions (HxLxD)	87.5 x 65.4 x 78.8 cm
Performance at:	+43°C	Fuel and cycle type:	Electric - compression

REFRIGERATOR	FREEZER	Freeze protection: Grade A
Vaccine storage capacity: (Litres)	61 Litres	
Gross volume (Litres):	80 Litres	Gross volume:
Holdover time (hours):	31 hrs 50 mins	Waterpack freezing capacity:
Energy consumption, stable running (kWh/24 hours):	0.57kWh/24h	Waterpack storage capacity:
Energy consumption, cool down test (kWh/24 hours):	0.63kWh/24h	Energy consumption during freezing:

Comments:

Accessories: 1. Instructions 2. Key 3. Handle component 4. Basket 5. Data logger

Spare parts (ref, price): Thermostat,
Compressor,
Basket up,;
Basket down,
Indicator lamp,
Fan,
Filter

Shipping volume:	0.45m3	Shipping weight:	73kg
Price year	2017	Incoterms	
Price	1 - 20 Units: \$720	21 - 100 Units: \$680	> 100 units: \$650
Quality standard:	- ISO 9001:2008 - ISO 13485 - ISO 14001 -	Specification ref.	
Verification report:	WB-17-166	Verification laboratory:	CHEARI

Current PQS status: *pre-qualified: 09 Jun 2017*

Validity until: *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.

E004

Insulated containers

This section covers cold boxes, vaccine carriers and other insulated containers used for the transport of vaccines.

E004.1 Choosing a cold box or vaccine carrier

Consider the following points when choosing equipment:

1. **Vaccine storage capacity:** Vaccine storage capacity is given on the individual product data sheets. The quantity and type of vaccine that needs to be transported depends upon the use to which the cold box or vaccine carrier is being put. For example:
 - *Large scale routine distribution:* In most countries, distributions from primary to sub-national store, and between sub-national stores, generally require a number of cold boxes. For this purpose it is good practice to separate OPV and the single antigen lyophilized vaccines from the freeze-sensitive and multi-valent vaccines. The former can safely be packed with frozen icepacks. The latter should preferably be packed with cool water-packs so as to eliminate the risk of freezing during transport. Freeze indicators will also be needed where the ambient temperatures may drop below 0°C.
 - *Small scale routine distribution:* A single cold box is typically used to transport vaccine from a sub-national store to a health facility. When all the vaccines have to be packed in a single cold box, cool water-packs should be used.
 - *Routine outreach:* Vaccine carrier will be packed with a mix of vaccines, and possibly supplements, appropriate to the local schedule.
 - *Campaigns:* A limited range of vaccines and/or supplements will be distributed between the primary and sub-national stores and the same limited range will be taken on outreach.
2. **Cold/warm life:** Three types of cold/warm life are given on the product data sheets.
 - Cold life with frozen icepacks.
 - Cool life with cool water-packs.
 - Warm life with warm water-packs

All three tests are carried out with the lid closed. To take account of cold box opening and transport delays, double the estimated cold/warm life requirement. For example; if a proposed activity is estimated to require a 24 hour cold life, purchase equipment that has a 48 hour cold life.
3. **Weight:** The maximum acceptable fully loaded weight depends upon how the box will be transported: by vehicle; by pack animal; by bicycle or by hand. For health and safety reasons a worker should not be asked to lift a load greater than 25 kgs and female workers may find this excessive. Larger cold boxes require two people to lift them.

4. **Durability:** Consider the conditions to which the cold box or vaccine carrier will be exposed. For example, durability is more important than weight for a box transported by vehicles over rough roads, so, it should have a good rating in the drop test. The reverse applies to hand-carried boxes where weight and carrying comfort is more important. The durability of vaccine carriers is only partly represented by the 'robustness' rating obtained during laboratory drop tests. Vaccine carriers are either constructed with a hard plastic exterior, or with a soft canvas/PVC bag around the insulated walls. Experience has shown that the soft, canvas type carriers do not last long. They are liable to tear and the catches and straps tend to break away. A warning about their short working life is included in the data sheets. Back-pack vaccine carriers are now available and these have ergonomic advantages.
5. **Foaming agent:** Products which use cyclopentane as the insulation foaming agent are environmentally preferable to products that use R141b. Vaccine carriers with inflatable liners are also available and these have no environmental impact. Products containing CFCs are no longer acceptable under PQS.
6. **Water-packs:** Before placing an order, check that water-packs are included. If they are not included, select water-packs that will fit the chosen box and order them at the same time. The product data sheets specify how many water-packs are required. Always order two sets so that one set can be frozen, or cooled, while the other set is in use.
7. **Water-pack standardization:** Wherever possible, try to purchase cold boxes and vaccine carriers which use just one size of water-pack and use these across the entire programme. This simplifies distribution management and prevents the use of water-packs which are not designed to fit the available cold boxes and vaccine carriers.

Cost: Insulated boxes are bulky and shipping costs can often represent a high proportion of the total delivered price. Consider both the purchase (EXW) price and the shipping cost before making a final decision. Choose a product that fulfils programme requirements at the lowest cost.

E004.2 Cool water-packs and warm water-packs

Refer to the vaccine distribution guidelines in the General information section for advice on the use of cool and warm water-packs. When used correctly, cool water-packs completely eliminate the risk of freezing freeze-sensitive vaccines. Correctly used, they do not cause a significant loss of potency due to heat exposure.

E004.3 Keeping vaccines cool during immunization sessions

Since 1997 vaccine carriers have been supplied with a foam pad insert. This serves as a temporary lid to keep vaccines cool whilst at the same time providing a surface to hold and protect vaccine vials during immunization sessions. The insert is a simple piece of soft foam, minimum 30 mm thickness, which fits tightly inside the "neck" of the carrier on top of the icepacks, and below the lid.

The old practice of removing an icepack from the carrier and placing the reconstituted vial in the hole moulded into its surface is no longer recommended. This practice has been shown to cause a significant loss of potency.

E004.4 Calculating requirements

To calculate the quantity of vaccine that must be transported, use data on vaccine volume per dose taken from Table 7 of [WHO/IVB/05.23. Guideline on the international packaging and shipping of vaccines](http://www.who.int/immunization_delivery/systems_policy/logistics/en/index6.html) or use the EVM Assistant tool which can be downloaded from the EVM website at:

http://www.who.int/immunization_delivery/systems_policy/logistics/en/index6.html

E004.5 Future developments

Field trials of large capacity insulated containers are underway. The vaccine storage capacity of these units is many times that of the largest current cold boxes. The units are either pallet-based or wheeled and they offer the possibility of simpler and more secure transport for large quantities of vaccine from primary to sub-national level.

There is an increasing need for larger capacity products at this point in the supply chain now that vaccine volumes are increasing dramatically. If the trials are successful, WHO will develop a suitable PQS specification.

E004 data sheets follow



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/002
Description:	Vaccine carrier Long range
Manufacturer's reference:	RCW 4
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Vaccine storage dimensions (cm):	21.1 x 10.9 x 15.7 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	3 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	7.3 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	3.1 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	36.2 x 28.3 x 29.9 cm	Insulation thickness:	23 - 27 mm
Internal dimensions: (LxW x H cm)	26.0 x 15.6 x 18.6 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	30.3 hours	Model coolant-pack	6 x 0.3 L + 2 x 0.3 L
Warm life at -20°C:	12.9 hours	Number coolantpacks required:	8 units
Cool life at +43°C:	6.7 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2016
Weight per carton (kg):	4.2 kg	Prices:	1-39 units: 257 €
Volume per carton (m3):	0.035 m3		40-99 units: 244 €
			100 or more units: 233 €
Test report reference:	A65524a	Laboratory:	Intertek UK
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 22 Mar 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/003
Description:	Cold box Short range
Manufacturer's reference:	RCW 8
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Vaccine storage dimensions (cm):	32.6 x 10.7 x 20.2 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	6 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	16.4 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	6.8 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	58.8 x 28.8 x 43.7 cm	Insulation thickness:	50 - 60 mm
Internal dimensions: (LxWxH cm)	46.0 x 18.0 x 24.5 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	57.9 hours	Model coolant-pack	10 x 0.6 L + 2 x 0.3 L
Warm life at -20°C:	21.6 hours	Number coolantpacks required:	12 units
Cool life at +43°C:	12.0 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2016
Weight per carton (kg):	10 kg	Prices:	1-39 units: 301 €
Volume per carton (m3):	0.089 m3		40-99 units: 285 €
			100 or more units: 272 €
Test report reference:	A65524b	Laboratory:	Intertek UK
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	pre-qualified; 22 Mar 2010	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/004
Description:	Cold box Long range
Manufacturer's reference:	RCW 12
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Vaccine storage dimensions (cm):	25.1 x 17.6 x 20.9 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	7 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	23.3 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	11.7 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	55.0 X 47.5 X 49.9 cm	Insulation thickness:	90 - 105 mm
Internal dimensions: (LxWxH cm)	34.0 x 26.0 x 27.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	114.9 hours	Model coolant-pack	0.6 L
Warm life at -20°C:	40.9 hours	Number coolantpacks required:	14 units
Cool life at +43°C:	26.4 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2016
Weight per carton (kg):	15 kg	Prices:	1-39 units: 579 €
Volume per carton (m3):	0.148 m3		40-99 units: 548 €
			100 or more units: 523 €
Test report reference:	A65524c	Laboratory:	Intertek UK
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 22 Mar 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/005
Description:	Cold box Long range
Manufacturer's reference:	RCW 25
Manufactured in:	Luxembourg
Company:	B Medical Systems Sarl (Dometic)
Address:	17 Op der Hei L-9809 Hosingen Luxembourg
Telephone:	+ 35 2 92 07 311
Email:	info@bmedicalsyste.ms.com
Web address:	www.bmedicalsyste.ms.com

Specifications

Vaccine storage dimensions (cm):	40.6 x 25.2 x 20.2 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	20 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	38.9 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	15.9 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	71.0 x 55.0 x 49.9 cm	Insulation thickness:	90 - 105 mm
Internal dimensions: (LxW x H cm)	49.6 x 33.4 x 26.4 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	134.6 hours	Model coolant-pack	0.6 L
Warm life at -20°C:	49.5 hours	Number coolantpacks required:	24 units
Cool life at +43°C:	34.4 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2016
Weight per carton (kg):	25 kg	Prices:	1-39 units: 735 €
Volume per carton (m3):	0.236 m3		40-99 units: 698 €
			100 or more units: 644 €
Test report reference:	A65524d	Laboratory:	Intertek UK
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 22 Mar 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/007
Description:	Vaccine carrier Short range
Manufacturer's reference:	ADVC 24
Manufactured in:	India
Company:	AOV International LLP
Address:	C-22/25, Sector 57, Nolda 201301 [U.P.], India
Telephone:	+91-9820895063, +91-8377009144
Email:	rakesh.gautam@aovinternational.net , info@aovinternational.net
Web address:	www.aovinternational.net

Specifications

Vaccine storage dimensions (cm):	17.3 x 10.3 x 4.5 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	0.8 Litre	External materials:	Polyethylene
weight fully loaded (Kg):	2.18 kg	Internal lining material:	Polystyrene
Weight empty (Kg):	1.34 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	25 x 18 x 21 cm	Insulation thickness:	32-36 mm
Internal dimensions: (LxWxH cm)	17.3 x 10.3 x 12.1 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	20 hours 16 mn	Model coolant-pack	0.4 L
Warm life at -20°C:	7 hours 55 mn	Number coolantpacks required:	2 units
Cool life at +43°C:	3 hours 53 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	12 units	Incoterms:	EXW
Pieces per carton:	12 units	Price base year:	2014
Weight per carton (kg):	21 kg	Prices:	7.5 USD per unit
Volume per carton (m3):	0.15 m3		
Test report reference:	S09EEC01924/AT/JT	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 26 Apr 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/009
Description:	Vaccine carrier Long range
Manufacturer's reference:	AVC 46
Manufactured in:	India
Company:	AOV International LLP
Address:	C-22/25, Sector 57, Noida 201301 [U.P.], India
Telephone:	+91-9820895063, +91-8377009144
Email:	rakesh.gautam@aovinternational.net , info@aovinternational.net
Web address:	www.aovinternational.net

Specifications

Vaccine storage dimensions (cm):	11.38 x 11.38 x 19.0 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	2.5 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	6.36 kg	Internal lining material:	Polystyrene
Weight empty (Kg):	2.98 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	27.0 x 27.0 x 32.0 cm	Insulation thickness:	32-35 mm
Internal dimensions: (LxWxH cm)	12.2 x 12.2 x 19.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	50 hours 12 mn	Model coolant-pack	0.6 L
Warm life at -20°C:	15 hours 57 mn	Number coolantpacks required:	4 units
Cool life at +43°C:	09 hours 47 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	4 units	Incoterms:	EXW
Pieces per carton:	4 units	Price base year:	2016
Weight per carton (kg):	14 kg	Prices:	12.00 USD
Volume per carton (m3):	0.11 m3		
Test report reference:	719164356EEC09/KGT	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 26 Apr 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/010
Description:	Cold box Long range
Manufacturer's reference:	AICB 444 L
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	44.8 x 30.0 x 16.7 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	18 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	48.87 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	19.93 kg	Insulation materials:	Polyurethane
External dimensions: (LxWxH cm)	76.1 x 61.1 x 51.3 cm	Insulation thickness:	100 mm
Internal dimensions: (LxWxH cm)	52.0 x 37.0 x 28.2 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	140 hours	Model coolant-pack	0.4 L
Warm life at -20°C:	51 hours	Number coolantpacks required:	44 units
Cool life at +43°C:	25 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	10 units	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2016
Weight per carton (kg):	50 kg	Prices:	10 or more units: 122 USD
Volume per carton (m3):	0.24 m3		
Test report reference:	719171845/EEC10	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 03 May 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/011
Description:	Vaccine carrier Short range
Manufacturer's reference:	AIDVC 24
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	16.5 x 10.0 x 5.0 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	0.9 Litre	External materials:	Polyethylene
weight fully loaded (Kg):	2.27 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	1.31 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	25.0 x 18.0 x 21.4 cm	Insulation thickness:	32 mm
Internal dimensions: (LxWxH cm)	16.5 x 10.0 x 12.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	21 hours 30 mn	Model coolant-pack	0.4 L
Warm life at -20°C:	8 hours	Number coolantpacks required:	2 units
Cool life at +43°C:	4 hours 30 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	24 units	Incoterms:	EXW
Pieces per carton:	12 units	Price base year:	2016
Weight per carton (kg):	30 kg	Prices:	7.50 US\$
Volume per carton (m3):	0.12 m3		
Test report reference:	719164808-EEC09/01	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	pre-qualified; 03 May 2010	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/012
Description:	Vaccine carrier Long range
Manufacturer's reference:	AIVC 44
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	9.0 x 9.0 x 16.7 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	1.6 Litre	External materials:	High Density Polyethylene
weight fully loaded (Kg):	4.33 kg	Internal lining material:	High Impact Polystyrene
Weight empty (Kg):	1.93 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	25.0 x 25.0 x 30.0 cm	Insulation thickness:	35 mm
Internal dimensions: (LxWxH cm)	9.96 x 9.96 x 16.7 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	39 hours	Model coolant-pack	0.4 L
Warm life at -20°C:	13 hours	Number coolantpacks required:	4 units
Cool life at +43°C:	6 hours 20 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	24 units	Incoterms:	EXW
Pieces per carton:	4 units	Price base year:	2016
Weight per carton (kg):	17.32 kg	Prices:	11.50 US\$
Volume per carton (m3):	0.075 m3		
Test report reference:	719164808-EEC09/02	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	pre-qualified; 03 May 2010	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/013
Description:	Cold box Long range
Manufacturer's reference:	RCB 444 L
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	45.0 x 30.0 x 17.0 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	23 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	38 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	17 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	77.4 x 61.6 x 53.0 cm	Insulation thickness:	111 mm
Internal dimensions: (LxWxH cm)	52.8 x 38.2 x 28.2 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	130 hours 08 mn	Model coolant-pack	0.4 L
Warm life at -20°C:	20 hours 25 mn	Number coolantpacks required:	44 units
Cool life at +43°C:	26 hours 57 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	24.26 kg	Prices:	1 or more units: 130 USD
Volume per carton (m3):	0.27 m3		
Test report reference:	WHO 10-001	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 11 May 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



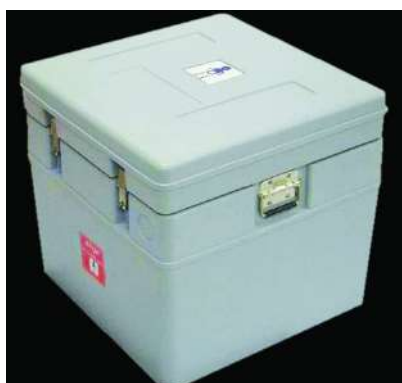
E004: Insulated containers

PQS code:	E004/015
Description:	Cold box Long range
Manufacturer's reference:	ACB 503 L
Manufactured in:	India
Company:	AOV International LLP
Address:	C-22/25, Sector 57, Nolda 201301 [U.P.], India
Telephone:	+91-9820895063, +91-8377009144
Email:	rakesh.gautam@aovinternational.net , info@aovinternational.net
Web address:	www.aovinternational.net

Specifications

Vaccine storage dimensions (cm):	45.5 x 30.5 x 16.0 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	18 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	45.86 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	21.78 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	77.0 x 61.0 x 51.0 cm	Insulation thickness:	100 mm
Internal dimensions: (LxWxH cm)	53.0 x 37.5 x 30.5 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	126 hours 32 mn	Model coolant-pack	0.3 L
Warm life at -20°C:	44 hours 48 mn	Number coolantpacks required:	50 units
Cool life at +43°C:	28 hours 05 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	25.5 kg	Prices:	115 USD per unit
Volume per carton (m3):	0.27 m3		
Test report reference:	719154910-EEC09	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 13 May 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/018
Description:	Cold box Long range
Manufacturer's reference:	CB-12-CF
Manufactured in:	India
Company:	Blowkings
Address:	53-C Mittal Court Nariman Point Mumbai 400021 India
Telephone:	+91-(0)22-22840120
Email:	blowkings@vsnl.com
Web address:	http://www.blowkings.co.in/

Specifications

Vaccine storage dimensions (cm):	30 x 22 x 21 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	12 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	45 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	20.4 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	61 x 60 x 56 cm	Insulation thickness:	110 mm
Internal dimensions: (LxWxH cm)	34 x 33 x 34.8 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	156 hours	Model coolant-pack	0.4 L
Warm life at -20°C:	53 hours	Number coolantpacks required:	42 units
Cool life at +43°C:	33 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2016
Weight per carton (kg):	25 kg	Prices:	120 USD per unit
Volume per carton (m3):	0.22 m3		
Test report reference:	719169974-EEC10	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 02 Sep 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/019
Description:	Cold box Short range
Manufacturer's reference:	CB-55-CF
Manufactured in:	India
Company:	Blowkings
Address:	53-C Mittal Court Nariman Point Mumbai 400021 India
Telephone:	+91-(0)22-22840120
Email:	blowkings@vsnl.com
Web address:	http://www.blowkings.co.in/

Specifications

Vaccine storage dimensions (cm):	28 x 21 x 16.5 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	7 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	23 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	8.7 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	49 x 44 x 39.5 cm	Insulation thickness:	55 mm
Internal dimensions: (LxWxH cm)	35 x 28.5 x 27 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	89 hours	Model coolant-pack	0.4 L
Warm life at -20°C:	31 hours	Number coolantpacks required:	24 units
Cool life at +43°C:	20 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	12 kg	Prices:	100 USD per unit
Volume per carton (m3):	0.09 m3		
Test report reference:	719164472EEC09	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 02 Sep 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/020
Description:	Vaccine carrier Long range
Manufacturer's reference:	BK - VC 2.6 - CF
Manufactured in:	India
Company:	Blowkings
Address:	53-C Mittal Court Nariman Point Mumbai 400021 India
Telephone:	+91-(0)22-22840120
Email:	blowkings@vsnl.com
Web address:	http://www.blowkings.co.in/

Specifications

Vaccine storage dimensions (cm):	11.5 x 11.5 x 19.5 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	2.6 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	4.5 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	1.9 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	26 x 26 x 32 cm	Insulation thickness:	40 mm
Internal dimensions: (LxWxH cm)	19 x 19 x 22.5 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	43 hours	Model coolant-pack	0.6 L
Warm life at -20°C:	18 hours	Number coolantpacks required:	4 units
Cool life at +43°C:	7 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	8 units	Incoterms:	EXW
Pieces per carton:	4 units	Price base year:	2014
Weight per carton (kg):	12 kg	Prices:	8 or more units: 16.00 US\$
Volume per carton (m3):	0.11 m3		
Test report reference:	S08EEC01362/AT/JT	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 02 Sep 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/021
Description:	Vaccine carrier Long range
Manufacturer's reference:	BK - VC 1.7 - CF
Manufactured in:	India
Company:	Blowkings
Address:	53-C Mittal Court Nariman Point Mumbai 400021 India
Telephone:	+91-(0)22-22840120
Email:	blowkings@vsnl.com
Web address:	http://www.blowkings.co.in/

Specifications

Vaccine storage dimensions (cm):	10 x 10 x 17 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	1.7 Litre	External materials:	Polyethylene
weight fully loaded (Kg):	4 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	1.6 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	26 x 25 x 28.5 cm	Insulation thickness:	40 mm
Internal dimensions: (LxWxH cm)	17 x 17 x 18.5 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	38 hours	Model coolant-pack	0.4 L
Warm life at -20°C:	13 hours	Number coolantpacks required:	4 units
Cool life at +43°C:	6 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	8 units	Incoterms:	EXW
Pieces per carton:	8 units	Price base year:	2016
Weight per carton (kg):	20 kg	Prices:	8 or more units: 14 USD
Volume per carton (m3):	0.17 m3		
Test report reference:	719171438EEC10	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 02 Sep 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/022
Description:	Vaccine carrier Short range
Manufacturer's reference:	VDC-24-CF
Manufactured in:	India
Company:	Blowkings
Address:	53-C Mittal Court Nariman Point Mumbai 400021 India
Telephone:	+91-(0)22-22840120
Email:	blowkings@vsnl.com
Web address:	http://www.blowkings.co.in/

Specifications

Vaccine storage dimensions (cm):	6 x 10 x 16.5 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	0.9 Litre	External materials:	Polyethylene
weight fully loaded (Kg):	2.2 kg	Internal lining material:	Polypropylene
Weight empty (Kg):	1 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	22.5 x 16 x 25 cm	Insulation thickness:	28 mm
Internal dimensions: (LxWxH cm)	13 x 10 x 16.5 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	20 hours	Model coolant-pack	0.4 L
Warm life at -20°C:	6 hours	Number coolantpacks required:	2 units
Cool life at +43°C:	3 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	12 units	Incoterms:	EXW
Pieces per carton:	12 units	Price base year:	2014
Weight per carton (kg):	12 kg	Prices:	9.00 USD per unit
Volume per carton (m3):	0.12 m3		
Test report reference:	719169972-EEC10/01	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	pre-qualified; 02 Sep 2010	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/023
Description:	Cold box Long range
Manufacturer's reference:	ACB 264 SL
Manufactured in:	India
Company:	AOV International LLP
Address:	C-22/25, Sector 57, Nolda 201301 [U.P.], India
Telephone:	+91-9820895063, +91-8377009144
Email:	rakesh.gautam@aovinternational.net , info@aovinternational.net
Web address:	www.aovinternational.net

Specifications

Vaccine storage dimensions (cm):	33.00 x 21.20 x 16.60 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	6 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	25.4 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	12.82 kg	Insulation materials:	Polyurethane
External dimensions: (LxWxH cm)	62.40 x 50.20 x 42.60 cm	Insulation thickness:	100 mm
Internal dimensions: (LxWxH cm)	40.30 x 28.20 x 21.10 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	132 hours 18 mn	Model coolant-pack	0.4 L
Warm life at -20°C:	48 hours 41 mn	Number coolantpacks required:	26 units
Cool life at +43°C:	29 hours 47 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2016
Weight per carton (kg):	16 kg	Prices:	85 USD per unit
Volume per carton (m3):	0.16 m3		
Test report reference:	719154908-EEC09 TUV SUD	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 13 Sep 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/025
Description:	Cold box Long range
Manufacturer's reference:	CB-20-CF
Manufactured in:	India
Company:	Blowkings
Address:	53-C Mittal Court Nariman Point Mumbai 400021 India
Telephone:	+91-(0)22-22840120
Email:	blowkings@vsnl.com
Web address:	http://www.blowkings.co.in/

Specifications

Vaccine storage dimensions (cm):	53.0 x 23.0 x 20.0 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	20 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	49.5 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	22 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	79.5 x 56.2 x 56.5 cm	Insulation thickness:	110 mm
Internal dimensions: (LxWxH cm)	53.0 x 30.0 x 32.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	138 hours	Model coolant-pack	0.4 L
Warm life at -20°C:	46 hours	Number coolantpacks required:	39 units
Cool life at +43°C:	31 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	27 kg	Prices:	160 USD per unit
Volume per carton (m3):	0.26 m3		
Test report reference:	719184761-EEC10	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 28 Sep 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/026
Description:	Cold box Short range
Manufacturer's reference:	RCB 246 LS
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	40.00 x 40.00 x 11.00 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	16 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	34.8 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	12.1 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	65.00 x 65.00 x 37.00 cm	Insulation thickness:	65 to 115 mm
Internal dimensions: (LxWxH cm)	48.00 x 48.00 x 21.00 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	73 hours 32 mn	Model coolant-pack	0.6 L
Warm life at -20°C:	19 hours 26 mn	Number coolantpacks required:	24 units
Cool life at +43°C:	26 hours 06 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	16.77 kg	Prices:	1 or more units: 100 US\$
Volume per carton (m3):	0.17 m3		
Test report reference:	WHO 10-011	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 01 Oct 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/027
Description:	Cold box Short range
Manufacturer's reference:	RCB 324 SS
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	41.00 x 41.00 x 9.00	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	15 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	33.85 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	12.2 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	65.00 x 65.00 x 37.00 cm	Insulation thickness:	65 to 115 mm
Internal dimensions: (LxWxH cm)	48.00 x 48.00 x 20.00 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	53 hours 36 mn	Model coolant-pack	0.4 L
Warm life at -20°C:	16 hours 23 mn	Number coolantpacks required:	32 units
Cool life at +43°C:	21 hours 03 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	16.65 kg	Prices:	1 or more units: 100 US\$
Volume per carton (m3):	0.17 m3		
Test report reference:	WHO 10-009	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 01 Oct 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/028
Description:	Vaccine carrier Short range
Manufacturer's reference:	BBVC 23
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	17.4 x 10.5 x 5.0 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	0.9 Litre	External materials:	Polyethylene
weight fully loaded (Kg):	2.4 kg	Internal lining material:	Polystyrene
Weight empty (Kg):	1.3 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	24.6 x 18.0 x 21.5 cm	Insulation thickness:	35 to 45 mm
Internal dimensions: (LxWxH cm)	17.4 x 10.5 x 12.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	17 hours 50 mn	Model coolant-pack	0.3 L
Warm life at -20°C:	4 hours 26 mn	Number coolantpacks required:	2 units
Cool life at +43°C:	4 hours 32 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	1.63 kg	Prices:	1 or more units: 8.7 US\$
Volume per carton (m3):	0.01 m3		
Test report reference:	WHO 10-007	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 13 Oct 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/029
Description:	Vaccine carrier Long range
Manufacturer's reference:	BCVC 43
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	9.5 x 9.5 x 17.0 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	1.5 Litre	External materials:	Polyethylene
weight fully loaded (Kg):	4.9 kg	Internal lining material:	Polystyrene
Weight empty (Kg):	2.6 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	28.0 x 28.0 x 31.5 cm	Insulation thickness:	45 to 105 mm
Internal dimensions: (LxWxH cm)	16.5 x 16.5 x 20.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	41 hours 2 mn	Model coolant-pack	0.3 L
Warm life at -20°C:	15 hours 43 mn	Number coolantpacks required:	4 units
Cool life at +43°C:	9 hours 30 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	3 kg	Prices:	1 or more units: 12.7 US\$
Volume per carton (m3):	0.02 m3		
Test report reference:	WHO 10-008	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	<i>pre-qualified; 13 Oct 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/030
Description:	Cold box Short range
Manufacturer's reference:	AICB 243 S
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	27.0 x 20.4 x 15.0 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	8 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	22.41 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	11.57 kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	54.4 x 44.5 x 42.0 cm	Insulation thickness:	65 mm
Internal dimensions: (LxWxH cm)	34.6 x 28.0 x 24.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	84 hours 7 mn	Model coolant-pack	0.3 L
Warm life at -20°C:	27 hours 51 mn	Number coolantpacks required:	24 units
Cool life at +43°C:	17 hours 1 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	10 units	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	23 kg	Prices:	10 or more units: 130 US\$
Volume per carton (m3):	0.101 m3		
Test report reference:	719184756-EEC10	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 27 Oct 2010</i>	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/031
Description:	Cold box Long range
Manufacturer's reference:	AICB 503 L
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	45.5 x 31.0 x 16.0 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	22.5 Litres	External materials:	Polyethylene
weight fully loaded (Kg):	48.02 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	19.73 kg	Insulation materials:	Polyurethane
External dimensions: (LxWxH cm)	76.5 x 61.2 x 51.5 cm	Insulation thickness:	100 mm
Internal dimensions: (LxWxH cm)	51.8 x 37.0 x 27.7 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	128 hours 16 mn	Model coolant-pack	0.3 L
Warm life at -20°C:	50 hours 4 mn	Number coolantpacks required:	50 units
Cool life at +43°C:	31 hours 8 mn	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	10 units	Price base year:	2016
Weight per carton (kg):	50 kg	Prices:	115 US\$
Volume per carton (m3):	0.24 m3		
Test report reference:	719180700-EEC10	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 27 Oct 2010</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



Denco LCX-6L

E004: Insulated containers

PQS code:	E004/033
Description:	Vaccine carrier Long range
Manufacturer's reference:	DENCO LCX-6L
Manufactured in:	China; People's Republic of
Company:	Xinxiang Dengke cold chain equipment Co., Ltd
Address:	Crossing of Xihuan Road and Beigan Road, Xinxiang City, Henan
Telephone:	+86 13462228981
Email:	qdcrc_trust@126.com ; 13462228981@126.com
Web address:	www.denco.com.cn ; www.xxlc.com

Specifications

Vaccine storage dimensions (cm):	15.8 x 6.70 x 16.8 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	1.6 L	External materials:	Polyethylene
weight fully loaded (Kg):	4.7 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	2.4 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	34.0 x 23.4 x 27.5 cm	Insulation thickness:	38 mm
Internal dimensions: (LxWxH cm)	23.5 x 14.5 x 17.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	39 hours 24 min	Model coolant-pack	WP 0.4L
Warm life at -20°C:	13 hours 28 min	Number coolantpacks required:	6 units
Cool life at +43°C:	10 hours 50 min	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	100 units	Incoterms:	FOB
Pieces per carton:	4 units	Price base year:	2016
Weight per carton (kg):	13 kg	Prices:	17 US\$
Volume per carton (m3):	0.086 m3		
Test report reference:	WB-12-731	Laboratory:	CHEARI
Quality standard:	-ISO 9001:2008-ISO 13485-		
Comments:			
Current PQS status:	<i>pre-qualified; 30 Jul 2012</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/034
Description:	Cold box Long range
Manufacturer's reference:	RCB 264 SL
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	32 x 21 x 10 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	6L	External materials:	Polyethylene
Weight fully loaded (Kg):	27.54 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	13.25 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	65 x 53 x 46 cm	Insulation thickness:	100mm
Internal dimensions: (LxWxH cm)	40 x 27.8 x 20 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	106 hours	Model coolant-pack	0.4L
Warm life at -20°C:	31 hours	Number coolantpacks required:	26
Cool life at +43°C:	30 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1	Incoterms:	EXW
Pieces per carton:	1	Price base year:	2014
Weight per carton (kg):	16.27 kg	Prices:	99 USD per unit
Volume per carton (m3):	0.14 m3		
Test report reference:	WHO-12-021	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 11 Dec 2012</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/035
Description:	Vaccine carrier Long range
Manufacturer's reference:	BCVC 44-A
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	9.5 x 9.5 x 16.0 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	1.44 L	External materials:	HDPE
Weight fully loaded (Kg):	4.9 kg	Internal lining material:	HIPS
Weight empty (Kg):	1.95 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	25.2 x 25.2 x 30.5 cm	Insulation thickness:	45 to 105 mm
Internal dimensions: (LxWxH cm)	16.5 x 16.5 x 16.5 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	39 hours 31	Model coolant-pack	Type 3, 0.4L
Warm life at -20°C:	13 hours 51	Number coolantpacks required:	4 x 0.4L
Cool life at +43°C:	8 hours 43	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 units	Price base year:	2014
Weight per carton (kg):	2.50 kg	Prices:	11.50 USD per unit
Volume per carton (m3):	0.02 m3		
Test report reference:	WHO-12-019	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 29 Jan 2013</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/036
Description:	Cold box Long range
Manufacturer's reference:	RCB 444L-A
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	45.00 x 30.00 x 15.00 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	20.25 L	External materials:	Polyethylene
Weight fully loaded (Kg):	49.70 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	20.525 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	77.00 x 62.00 x 53.50 cm	Insulation thickness:	110 mm
Internal dimensions: (LxWxH cm)	51.00 x 36.00 x 27.50 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	152 hours 28min	Model coolant-pack	Type 3, 0.4L
Warm life at -20°C:	27 hours 35 min	Number coolantpacks required:	44 x 0.4L
Cool life at +43°C:	51 hours 17 min	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 units	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	25.21 kg	Prices:	132.00 USD per unit
Volume per carton (m3):	0.25 m3		
Test report reference:	WHO 12-022	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 30 Jan 2013</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/037
Description:	Cold box Short range
Manufacturer's reference:	RCB 264 SS
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	33.2 x 21.0 x 9.0 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	6.3 L	External materials:	Polyethylene
weight fully loaded (Kg):	29.1 kg	Internal lining material:	Polyethylene
Weight empty (Kg):	14.7 kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	64.0 x 51.0 x 46.0 cm	Insulation thickness:	105 to 165 mm
Internal dimensions: (LxWxH cm)	40.0 x 27.5 x 20.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	79 hours 43 min	Model coolant-pack	waterpacks
Warm life at -20°C:	29 hours 20 min	Number coolantpacks required:	26 x 0.4L
Cool life at +43°C:	20 hours 42 min	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1	Price base year:	2013
Weight per carton (kg):	15 kg	Prices:	97USD per unit
Volume per carton (m3):	0.14 m3		
Test report reference:	WHO 10-013 corr1	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 13 Mar 2013</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/038
Description:	Vaccine carrier Long range
Manufacturer's reference:	DENCO LCX-3.6L
Manufactured in:	China; People's Republic of
Company:	Xinxiang Dengke cold chain equipment Co., Ltd
Address:	Crossing of Xihuan Road and Beigan Road, Xinxiang City, Henan
Telephone:	+86 13462228981
Email:	qdcrc_trust@126.com ; 13462228981@126.com
Web address:	www.denco.com.cn ; www.xxlc.com

Specifications

Vaccine storage dimensions (cm):	16.3 x 16.3 x 17.0 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	1.4L	External materials:	Polyethylene
weight fully loaded (Kg):	3.22kg	Internal lining material:	Polyethylene
Weight empty (Kg):	1.78kg	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	25.0 x 25.0 x 28.0 cm	Insulation thickness:	40mm
Internal dimensions: (LxWxH cm)	16.3 x 16.3 x 17.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	39h19min	Model coolant-pack	0.3L
Warm life at -20°C:	12h44min	Number coolantpacks required:	4
Cool life at +43°C:	8h15min	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	300	Incoterms:	FOB
Pieces per carton:	6 units per carton	Price base year:	2016
Weight per carton (kg):	13.5kg	Prices:	12 US\$
Volume per carton (m3):	0.127m3		
Test report reference:	CTIHEA-WT01E	Laboratory:	CHEARI
Quality standard:	-ISO 13485-		
Comments:			
Current PQS status:	<i>pre-qualified; 21 Jan 2014</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/040
Description:	Vaccine carrier Long range
Manufacturer's reference:	BCVC46
Manufactured in:	India
Company:	Nilkamal Limited
Address:	Street No 14, MIDC - Andheri (East) Mumbai-400093 India
Telephone:	+91 9833 140603
Email:	rajesh.patwardhan@nilkamal.com ; vaishali.gaikwad@nilkamal.com ; nayan.parekh@nilkamal.com
Web address:	http://www.nilkamal.com/

Specifications

Vaccine storage dimensions (cm):	12.0 x 12.0 x 19.0 cm	Lid type and fixing	Removable lid
Vaccine storage volume (L):	2.7 L	External materials:	Polyethylene
weight fully loaded (Kg):	6.4kg	Internal lining material:	Polystyrene
Weight empty (Kg):	2.32kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	27.0 x 27.0 x 32.0 cm	Insulation thickness:	28 to 58 mm
Internal dimensions: (LxWxH cm)	19.0 x 19.0 x 19.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	46 hours 23 min	Model coolant-pack	Type 4: 0.6L
Warm life at -20°C:	17 hours 12 min	Number coolantpacks required:	4 units
Cool life at +43°C:	13 hours 43 min	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	N/A		
Minimum order:	1 units	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2014
Weight per carton (kg):	3.056 kg per unit	Prices:	15.80 USD per unit
Volume per carton (m3):	0.02m3 per unit		
Test report reference:	WHO 14-027 V2	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 22 Apr 2014</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/041
Description:	Cold box Long Term Storage
Manufacturer's reference:	ARKTEK-YBC-5
Manufactured in:	China; People's Republic of
Company:	AUCMA CO. Ltd.
Address:	315 Qianwangang Road, Economic & Technological Development Zone, Qingdao, China
Telephone:	+86 532 88965799
Email:	info@aucma.com.cn
Web address:	http://www.aucma.com.cn

Specifications

Vaccine storage dimensions (cm):	28.3 x 9.8 x 28.5	Lid type and fixing	Removable lid
Vaccine storage volume (L):	7.9	External materials:	HDPE
weight fully loaded (Kg):	39.5	Internal lining material:	Aluminum Alloy
Weight empty (Kg):	22	Insulation materials:	Dewar
External dimensions: (LxW x H cm)	Diam 52.8 x 74.7 cm	Insulation thickness:	40
Internal dimensions: (LxWxH cm)	Diam 31.1 x 33.2 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	35 days	Model coolant-pack	Unique for device
Warm life at -20°C:	6.1 days (test 8)	Number coolantpacks required:	8 units x 1L
Cool life at +43°C:	N/A	Coolantpacks supplied:	Yes
Minimum Rated Ambient:	+5°C		
Minimum order:	5 units	Incoterms:	FCA
Pieces per carton:	1 piece	Price base year:	2015
Weight per carton (kg):	32.5 kg	Prices:	up to 99 units: 2393 USD per unit
Volume per carton (m3):	0.376 m3		100 units and more: 2193 USD
Test report reference:	WB-14-644	Laboratory:	CHEARI
Quality standard:	-ISO 9001:2008-		
Comments:	This device is intended to be used as a stationary passive container to store vaccines for a period of minimum 35 days before recharge with icepacks		
Current PQS status:	pre-qualified; 15 Jan 2015	Valid until:	May 2018
Subject to Field validation:	In process	Date field validation:	
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased			



E004: Insulated containers

PQS code:	E004/042
Description:	Cold box Short range
Manufacturer's reference:	EBT-30
Manufactured in:	Japan
Company:	EBARA CO. Ltd.
Address:	1-6-5 Yakumo, Meguro-Ku 152-0023 Tokyo Japan
Telephone:	+81 3 3724 3681; +82 70 8654 1049
Email:	ebara@ebac.co.jp ; k.jongwon@ebac.co.jp
Web address:	www.ebac.co.jp

Specifications

Vaccine storage dimensions (cm):	36.8 x 18.0 x 25.0	Lid type and fixing	Gripping strips
Vaccine storage volume (L):	16.5	External materials:	Aluminum film
weight fully loaded (Kg):	14.7	Internal lining material:	Aluminum film
Weight empty (Kg):	2.24	Insulation materials:	phenolic foam
External dimensions: (LxW x H cm)	50 x 37 x 38	Insulation thickness:	40
Internal dimensions: (LxWxH cm)	40.0 x 28.0 x 27.0	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	60.5	Model coolant-pack	0.4L
Warm life at -20°C:	38.26	Number coolantpacks required:	16
Cool life at +43°C:	18.45	Coolantpacks supplied:	Yes
Minimum Rated Ambient:			
Minimum order:	1 unit	Incoterms:	EXW
Pieces per carton:	1 unit	Price base year:	2015
Weight per carton (kg):	3	Prices:	400 USD per unit
Volume per carton (m3):	0.07 m3		
Test report reference:	WB-14-301	Laboratory:	CHEARI
Quality standard:	-ISO 9001:2008-ISO 13485-		
Comments:			
Current PQS status:	<i>pre-qualified; 14 Apr 2015</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/043
Description:	Vaccine carrier Long range
Manufacturer's reference:	BK-VC 3.4-CF
Manufactured in:	India
Company:	Blowkings
Address:	53-C Mittal Court Nariman Point Mumbai 400021 India
Telephone:	+91-(0)22-22840120
Email:	blowkings@vsnl.com
Web address:	http://www.blowkings.co.in/

Specifications

Vaccine storage dimensions (cm):	13.3 x1 3.3 x 19 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	3.4L	External materials:	Polyethylene
weight fully loaded (Kg):	4.9Kg	Internal lining material:	Polyethylene
Weight empty (Kg):	2.26Kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	28.8 x 28.9 x 33.7 cms	Insulation thickness:	40 mm
Internal dimensions: (LxWxH cm)	13.3 x1 3.3 x 19 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	43.43 hours	Model coolant-pack	0.6 L
Warm life at -20°C:	16 hours	Number coolantpacks required:	4
Cool life at +43°C:	8 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:			
Minimum order:	4	Incoterms:	EXW
Pieces per carton:	4	Price base year:	2016
Weight per carton (kg):	13 Kg	Prices:	\$21 per unit for 4 or more units
Volume per carton (m3):	0.12 m3		
Test report reference:	7191118692□EEC15/KGT	Laboratory:	TUV SUD PSB Pte Ltd
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	<i>pre-qualified; 23 May 2016</i>		Valid until: May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/044
Description:	Vaccine carrier Long range
Manufacturer's reference:	AIVC 44 LR
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	10.02 x 10.02 x 1.67 cm	Lid type and fixing	Gripping strips
Vaccine storage volume (L):	1.67	External materials:	Polyethylene
weight fully loaded (Kg):	4.34	Internal lining material:	Polyethylene
Weight empty (Kg):	1.99	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	25.0 x 25.0 x 30.0 cm	Insulation thickness:	35 mm
Internal dimensions: (LxW x H cm)	10.45 x 10.45 x 1.67 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	35.7	Model coolant-pack	0.4 L
Warm life at -20°C:	17.3	Number coolantpacks required:	4
Cool life at +43°C:	3.25	Coolantpacks supplied:	Yes
Minimum Rated Ambient:			
Minimum order:	1000	Incoterms:	FOB
Pieces per carton:	8	Price base year:	2016
Weight per carton (kg):	18	Prices:	11.50 USD per unit
Volume per carton (m3):	0.18 m3		
Test report reference:	CE-JOB-DEL-16-000426-005	Laboratory:	Intertek India
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	pre-qualified; 04 Jul 2016	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E004: Insulated containers

PQS code:	E004/045
Description:	Cold box Long range
Manufacturer's reference:	AICB-156L
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	27.0 x 20.0 x 10.3 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	5.5	External materials:	Polyethylene
weight fully loaded (Kg):	22.33	Internal lining material:	Polyethylene
Weight empty (Kg):	9.4	Insulation materials:	Polyurethane
External dimensions: (LxW x H cm)	54.0 x 44.5 x 41.5 cm	Insulation thickness:	65 - 75 mm
Internal dimensions: (LxW x H cm)	35.0 x 28.0 x 24.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	107.5	Model coolant-pack	0.6L
Warm life at -20°C:	33.7	Number coolantpacks required:	15
Cool life at +43°C:	22.9	Coolantpacks supplied:	Yes
Minimum Rated Ambient:			
Minimum order:	10	Incoterms:	FOB
Pieces per carton:	1 piece	Price base year:	2016
Weight per carton (kg):	13.7	Prices:	130.0 USD per unit
Volume per carton (m3):	0.11 m3		
Test report reference:	CE-JOB-DEL-16-000426-006	Laboratory:	Intertek India
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	pre-qualified; 04 Jul 2016	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/046
Description:	Cold box Long range
Manufacturer's reference:	AICB-316L
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	44.8 x 29.8 x 16.8 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	22.4	External materials:	Polyethylene
weight fully loaded (Kg):	49.2	Internal lining material:	Polyethylene
Weight empty (Kg):	18.15	Insulation materials:	Polyurethane
External dimensions: (LxWxH cm)	77.0 x 61.5 x 51.5 cm	Insulation thickness:	100 mm
Internal dimensions: (LxWxH cm)	52.0 x 37.0 x 28.2 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	153.5	Model coolant-pack	0.6L
Warm life at -20°C:	69	Number coolantpacks required:	31 X 0.6L
Cool life at +43°C:	41.7	Coolantpacks supplied:	Yes
Minimum Rated Ambient:			
Minimum order:	10	Incoterms:	FOB
Pieces per carton:	1 piece	Price base year:	2016
Weight per carton (kg):	25	Prices:	122.0 USD per unit
Volume per carton (m3):	0.27 m3		
Test report reference:	CE-JOB-DEL-16-000426-004	Laboratory:	Intertek India
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	pre-qualified; 04 Jul 2016	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code:	E004/047
Description:	
Manufacturer's reference:	AIVC - 46
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Vaccine storage dimensions (cm):	12.4 cm x 12.4 cm x 19 cm	Lid type and fixing	
Vaccine storage volume (L):	2.9 litres	External materials:	Polyethylene
weight fully loaded (Kg):	5.36 Kg	Internal lining material:	Polyethylene
Weight empty (Kg):	2.63 Kg	Insulation materials:	Polyurethane
External dimensions: (LxW H cm)	29 cm x 29 cm x 32.7 cm	Insulation thickness:	41 mm
Internal dimensions: (LxWxH cm)	19.9 cm x 19.9 cm x 19cm	Type of coolantpacks required:	
Cold life at +43°C:	51 hours 8 minutes	Model coolant-pack	
Warm life at -20°C:	25 hrs 11 minutes	Number coolantpacks required:	4
Cool life at +43°C:	12 hrs 55 mintutes	Coolantpacks supplied:	Yes
Minimum Rated Ambient:			
Minimum order:		Incoterms:	EXW
Pieces per carton:		Price base year:	2016
Weight per carton (kg):		Prices:	
Volume per carton (m3):			
Test report reference:		Laboratory:	Intertek India
Quality standard:	-ISO 9001:2008-		
Comments:			
Current PQS status:	pre-qualified; 16 Jan 2017	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	1/16/2017 12:00:00 AM

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E004: Insulated containers

PQS code: E004/048
Description: Vaccine carrier Long range
Manufacturer's reference: RCW1
Manufactured in: Luxembourg
Company: B Medical Systems Sarl (Dometic)
Address: 17 Op der Hei
L-9809 Hosingen
Luxembourg
Telephone: + 35 2 92 07 311
Email: info@bmedicalsyste.ms.com
Web address: www.bmedicalsyste.ms.com

Specifications

Vaccine storage dimensions (cm):	10.2 (diameter) x 14.5 cm	Lid type and fixing	Fixed hinges
Vaccine storage volume (L):	1.18 Litres	External materials:	Polyethelene & POM
weight fully loaded (Kg):	7.1 kg	Internal lining material:	Polythelene & POM
Weight empty (Kg):	4.7 kg	Insulation materials:	Polyurethane
External dimensions: (LxWxH cm)	34.0 x 28.5 x 44.0 cm	Insulation thickness:	51 - 116 mm
Internal dimensions: (LxWxH cm)	22.0 x 14.0 x 20.0 cm	Type of coolantpacks required:	Waterpacks
Cold life at +43°C:	34.65 hours	Model coolant-pack	0.6 L
Warm life at -20°C:	15.1 hours	Number coolantpacks required:	3
Cool life at +43°C:	8.14 hours	Coolantpacks supplied:	Yes
Minimum Rated Ambient:			
Minimum order:	1	Incoterms:	EXW
Pieces per carton:	1	Price base year:	2017
Weight per carton (kg):	9 kg	Prices:	1-39 units: €110
Volume per carton (m3):	0.047 m3		40-99 units: €104
			100 and more: €99
Test report reference:	WHO-16-016	Laboratory:	CEMAFROID SAS
Quality standard:	-ISO 9001:2008-Other-		
Comments:			
Current PQS status:	pre-qualified; 06 Feb 2017	Valid until:	May 2018
Subject to Field validation:	N/A	Date field validation:	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased

E005

Water-packs

This section covers water-packs which are used as the temperature control medium in the insulated containers described in Section E004.

E005.1 **Choosing water-packs**

The water-packs listed in the E005 product data sheets are all suitable for use in the transport of vaccines. They can all be used as conventional frozen icepacks, as cool water-packs or as warm water-packs in cold climates. When selecting water-packs for a programme, consider the following points:

- PQS allows three standard water-packs sizes - 0.3 litre, 0.4 litre and 0.6 litre. Make sure you order the correct size for each type of cold box or vaccine carrier. Try to select cold boxes and vaccine carriers which use just one size of water-pack.
- Most cold boxes and vaccine carriers are supplied with a single set of water-packs. It is good practice to order an extra set so that one set can be frozen or cooled while the other set is in use. The additional set also covers the inevitable losses that occur over the lifetime of the box.
- DO NOT purchase pre-filled water-packs. These often contain an additive, which may lower the freezing point to below 0°C. Their use can endanger freeze-sensitive vaccines.

E005.2 **Future developments**

WHO will continue to review the use of eutectic-based coolant products which change phase above 0°C. At present the simplicity and low transport costs associated with water-based products which are filled in-country are considered to outweigh the possible performance benefits of eutectics.

E005 data sheets follow



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/001
Description: Water-pack 0.6L
Manufacturer's reference: Bmedical WP 0.6L
Manufactured in: Luxembourg
Company: B Medical Systems Sarl (Dometic)
Address: 17 Op der Hei
L-9809 Hosingen
Luxembourg
Telephone: + 35 2 92 07 311
Email: info@bmedicalsystems.com
Web address: www.bmedicalsystems.com

Specifications

Nominal capacity (Liter):	0.6 L	Weight empty (g):	79 g
Rated water content (Liter)	0.58 L	Weight filled (g):	655 g
External dimensions (mm):	190 x 120 x 35 mm		
Minimum order:	1 unit	Pieces per carton:	24 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	1-39 sets of 24 units: 40€ 40-99 sets of 24 units: 38€ 100 or more sets of 24 units: 36 €	Volume per carton (m3):	0.025 m3
		Weight per carton (kg):	3 kg
Test report:	A65899b	Verification laboratory:	Intertek India
Comments:			
Current PQS status:	pre-qualified ; 08 Dec 2009	Valid until :	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



E005: Coolant packs for insulated containers

PQS code: E005/002
Description: Water-pack 0.3L
Manufacturer's reference: Bmedical WP 0.3L
Manufactured in: Luxembourg
Company: B Medical Systems Sarl (Dometic)
Address: 17 Op der Hei
L-9809 Hosingen
Luxembourg
Telephone: + 35 2 92 07 311
Email: info@bmedicalsystems.com
Web address: www.bmedicalsystems.com

Specifications

Nominal capacity (Liter):	0.3 L	Weight empty (g):	69 g
Rated water content (Liter)	0.35 L	Weight filled (g):	418 g
External dimensions (mm):	170 x 120 x 25 mm		
Minimum order:	1 unit	Pieces per carton:	40 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	1-39 sets of 40 units: 53 € 40-99 sets of 40 units: 50 € 100 or more sets: 49 €	Volume per carton (m3):	0.025 m3
		Weight per carton (kg):	3 kg
Test report:	A65899a	Verification laboratory:	Intertek India
Comments:			
Current PQS status:	pre-qualified ; 22 Mar 2010	Valid until :	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/004
Description: Water-pack 0.3 L
Manufacturer's reference: AIP-3
Manufactured in: India
Company: AOV International LLP
Address: C-22/25, Sector 57, Noida 201301 [U.P.], India
Telephone: +91-9820895063, +91-8377009144
Email: rakesh.gautam@aovinternational.net,
info@aovinternational.net
Web address: www.aovinternational.net

Specifications

Nominal capacity (Liter):	0.3 L	Weight empty (g):	76 g
Rated water content (Liter)	0.35 L	Weight filled (g):	363 g
External dimensions (mm):	160 x 91 x 34 mm		

Minimum order:	240 units	Pieces per carton:	240 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	0.35 USD per unit	Volume per carton (m3):	0.16 m3
		Weight per carton (kg):	22 kg

Test report:	S09EEC02224/AT/JT	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	pre-qualified ; 26 Apr 2010	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/005
Description: Water-pack 0.4 L
Manufacturer's reference: AIP-4
Manufactured in: India
Company: AOV International LLP
Address: C-22/25, Sector 57, Noida 201301 [U.P.], India
Telephone: +91-9820895063, +91-8377009144
Email: rakesh.gautam@aovinternational.net,
info@aovinternational.net
Web address: www.aovinternational.net

Specifications

Nominal capacity (Liter):	0.4 L	Weight empty (g):	78 g
Rated water content (Liter)	0.35 L	Weight filled (g):	432 g
External dimensions (mm):	164 x 95 x 34 mm		
Minimum order:	230 units	Pieces per carton:	230 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	0.40 USD per unit	Volume per carton (m3):	0.16 m3
		Weight per carton (kg):	21 kg
Test report:	S09EEC02224/ATJT	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	pre-qualified ; 26 Apr 2010	Valid until :	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/006
Description: Water-pack 0.6L
Manufacturer's reference: AIP-6
Manufactured in: India
Company: AOV International LLP
Address: C-22/25, Sector 57, Noida 201301 [U.P.], India
Telephone: +91-9820895063, +91-8377009144
Email: rakesh.gautam@aovinternational.net,
info@aovinternational.net
Web address: www.aovinternational.net

Specifications

Nominal capacity (Liter):	0.6 L	Weight empty (g):	110 g
Rated water content (Liter)	0.55 L	Weight filled (g):	664 g
External dimensions (mm):	190 x 119 x 35 mm		

Minimum order:	150 units	Pieces per carton:	150 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	0.60 USD per unit	Volume per carton (m3):	0.16 m3
		Weight per carton (kg):	20 kg

Test report:	EEC09/719162291	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	<i>pre-qualified ; 26 Apr 2010</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



E005: Coolant packs for insulated containers

PQS code:	E005/007
Description:	Water-pack 0.3L
Manufacturer's reference:	AIIP-03
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Nominal capacity (Liter):	0.3 L	Weight empty (g):	77 g
Rated water content (Liter)	0.29 L	Weight filled (g):	363 g
External dimensions (mm):	161 x 89 x 31.5 mm		
Minimum order:	100 units	Pieces per carton:	100 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	100 units or more: 0.45 USD	Volume per carton (m3):	0.045 m3
		Weight per carton (kg):	8 kg
Test report:	719164810EEC09/03	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	<i>pre-qualified ; 03 May 2010</i>	Valid until :	<i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



E005: Coolant packs for insulated containers

PQS code:	E005/008
Description:	Water-pack 0.4L
Manufacturer's reference:	AIIP-0.4
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Nominal capacity (Liter):	0.4 L	Weight empty (g):	77 g
Rated water content (Liter)	0.35 L	Weight filled (g):	428 g
External dimensions (mm):	163.25 x 95.6 x 34.35 mm		
Minimum order:	100 units	Pieces per carton:	100 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	100 units or more: 0.50 USD	Volume per carton (m3):	0.054 m3
		Weight per carton (kg):	8 kg
Test report:	719164808EEC09/02	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	pre-qualified ; 03 May 2010	Valid until :	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code:	E005/009
Description:	Water-pack 0.6 L
Manufacturer's reference:	AIIP-06
Manufactured in:	India
Company:	Apex International
Address:	G47, Sector 39 Noida 201301 India
Telephone:	+91-120-2574851
Email:	mail@apexint.org
Web address:	http://www.apex-international.org/

Specifications

Nominal capacity (Liter):	0.6 L	Weight empty (g):	111 g
Rated water content (Liter)	0.56 L	Weight filled (g):	666 g
External dimensions (mm):	189.55 x 121.20 x 34.34 mm		
Minimum order:	100 units	Pieces per carton:	100 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	100 units or more: 0.65 USD	Volume per carton (m3):	0.079 m3
		Weight per carton (kg):	11.5 kg
Test report:	719164808EEC09/01	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	<i>pre-qualified ; 03 May 2010</i>	Valid until :	<i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/010
Description: Water-pack 0.3 L
Manufacturer's reference: BK-V4H
Manufactured in: India
Company: Blowkings
53-C Mittal Court
Nariman Point
Mumbai 400021
India
Address:
Telephone: +91-(0)22-22840120
Email: blowkings@vsnl.com
Web address: <http://www.blowkings.co.in/>

Specifications

Nominal capacity (Liter):	0.3L	Weight empty (g):	69 g
Rated water content (Liter)	0.3 L	Weight filled (g):	374 g
External dimensions (mm):	162.4 x 89.9 x 34.3 mm		
Minimum order:	225 units	Pieces per carton:	225 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	225 units or more: 0.45 USD	Volume per carton (m3):	0.12 m3
		Weight per carton (kg):	22 kg
Test report:	719170704-EEC10	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	pre-qualified ; 02 Sep 2010	Valid until :	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/011
Description: water-pack 0.4L
Manufacturer's reference: BK-4
Manufactured in: India
Company: Blowkings
53-C Mittal Court
Nariman Point
Mumbai 400021
India
Address:
Telephone: +91-(0)22-22840120
Email: blowkings@vsnl.com
Web address: <http://www.blowkings.co.in/>

Specifications

Nominal capacity (Liter):	0.4 L	Weight empty (g):	70 g
Rated water content (Liter)	0.39 L	Weight filled (g):	430 g
External dimensions (mm):	165 x 93 x 35 mm		
Minimum order:	225 units	Pieces per carton:	225 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	225 units or more: 0.50 USD	Volume per carton (m3):	0.13 m3
		Weight per carton (kg):	22 kg
Test report:	EEC09-719162420-B	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	pre-qualified ; 02 Sep 2010	Valid until :	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



E005: Coolant packs for insulated containers

PQS code: E005/012
Description: Water-pack 0.6L
Manufacturer's reference: BK-6
Manufactured in: India
Company: Blowkings
53-C Mittal Court
Nariman Point
Mumbai 400021
India
Address:
Telephone: +91-(0)22-22840120
Email: blowkings@vsnl.com
Web address: <http://www.blowkings.co.in/>

Specifications

Nominal capacity (Liter):	0.6 L	Weight empty (g):	110 g
Rated water content (Liter)	0.55 L	Weight filled (g):	655 g
External dimensions (mm):	190 x 120 x 35 mm		
Minimum order:	144 units	Pieces per carton:	144 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	144 units or more: 0.65 USD	Volume per carton (m3):	0.13 m3
		Weight per carton (kg):	22 kg
Test report:	EEC09-719162420 A	Verification laboratory:	TUV SUD PSB Pte Ltd
Comments:			
Current PQS status:	pre-qualified ; 02 Sep 2010	Valid until :	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/013
Description: Water-pack 0.3L T2
Manufacturer's reference: BIP-3
Manufactured in: India
Company: Nilkamal Limited
Street No 14,
MIDC - Andheri (East)
Mumbai-400093
India
Address:
Telephone: +91 9833 140603
Email: rajesh.patwardhan@nilkamal.com;
vaishali.gaikwad@nilkamal.com;
nayan.parekh@nilkamal.com
Web address: <http://www.nilkamal.com/>

Specifications

Nominal capacity (Liter):	0.3 L	Weight empty (g):	75 g
Rated water content (Liter)	0.29 L	Weight filled (g):	370 g
External dimensions (mm):	163 x 90.5 x 33 mm		

Minimum order:	380 units	Pieces per carton:	380 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	380 units or more: 0.47 USD	Volume per carton (m3):	0.20 m3
		Weight per carton (kg):	30.5 kg

Test report:	WHO 10-004	Verification laboratory:	CEMAFROID SAS
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Comments:

Current PQS status:	<i>pre-qualified ; 15 Oct 2010</i>	Valid until :	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/014
Description: Water-pack 0.4L
Manufacturer's reference: BIP-4
Manufactured in: India
Company: Nilkamal Limited
Address: Street No 14,
MIDC - Andheri (East)
Mumbai-400093
India
Telephone: +91 9833 140603
Email: rajesh.patwardhan@nilkamal.com;
vaishali.gaikwad@nilkamal.com;
nayan.parekh@nilkamal.com
Web address: <http://www.nilkamal.com/>

Specifications

Nominal capacity (Liter):	0.4 L	Weight empty (g):	76 g
Rated water content (Liter)	0.35 L	Weight filled (g):	431 g
External dimensions (mm):	165 x 95 x 33 mm		

Minimum order:	380 units	Pieces per carton:	380 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	380 units or more: 0.49 USD	Volume per carton (m3):	0.20 m3
		Weight per carton (kg):	30.88 kg

Test report:	WHO 10-005	Verification laboratory:	CEMAFROID SAS
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Comments:

Current PQS status:	<i>pre-qualified ; 15 Oct 2010</i>	Valid until :	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E005: Coolant packs for insulated containers

PQS code: E005/015
Description: Water-pack 0.6L
Manufacturer's reference: BIP-6
Manufactured in: India
Company: Nilkamal Limited
Address: Street No 14,
MIDC - Andheri (East)
Mumbai-400093
India
Telephone: +91 9833 140603
Email: rajesh.patwardhan@nilkamal.com;
vaishali.gaikwad@nilkamal.com;
nayan.parekh@nilkamal.com
Web address: <http://www.nilkamal.com/>

Specifications

Nominal capacity (Liter):	0.6 L	Weight empty (g):	114 g
Rated water content (Liter)	0.56 L	Weight filled (g):	650 g
External dimensions (mm):	190 x 121 x 35 mm		

Minimum order:	240 units	Pieces per carton:	150 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	240 units or more: 0.63 USD	Volume per carton (m3):	0.20 m3
		Weight per carton (kg):	29.36 kg

Test report:	WHO 10-006	Verification laboratory:	CEMAFROID SAS
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Comments:

Current PQS status:	<i>pre-qualified ; 15 Oct 2010</i>	Valid until :	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E005/017 XD 0.3L

E005: Coolant packs for insulated containers

PQS code:	E005/017
Description:	Waterpack 0.3L
Manufacturer's reference:	Denco Waterpack 0.3L
Manufactured in:	China; People's Republic of
Company:	Xinxiang Dengke cold chain equipment Co., Ltd
Address:	Crossing of Xihuan Road and Beigan Road, Xinxiang City, Henan
Telephone:	+86 13462228981
Email:	qdcree_trust@126.com ; 13462228981@126.com
Web address:	www.denco.com.cn ; www.xxlcb.com

Specifications

Nominal capacity (Liter):	0.3 L	Weight empty (g):	75 g
Rated water content (Liter)	0.3 L	Weight filled (g):	380 g
External dimensions (mm):	163 x 90 x 34 mm		

Minimum order:	300 units	Pieces per carton:	300
Year base price:	2016	Incoterms:	FOB
Price / unit:	300 units and more: 0.429USD per unit	Volume per carton (m3):	0.164m3
		Weight per carton (kg):	23.5 kg

Test report:	WB-11-740	Verification laboratory:	CHEARI
Comments:			
Current PQS status:	pre-qualified ; 30 Jul 2012	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E005: Coolant packs for insulated containers

PQS code:	E005/018
Description:	Waterpack 0.4L
Manufacturer's reference:	Denco Waterpack 0.4L
Manufactured in:	China; People's Republic of
Company:	Xinxiang Dengke cold chain equipment Co., Ltd
Address:	Crossing of Xihuan Road and Beigan Road, Xinxiang City, Henan
Telephone:	+86 13462228981
Email:	qdcrc_trust@126.com ; 13462228981@126.com
Web address:	www.denco.com.cn ; www.xxlcb.com

Specifications

Nominal capacity (Liter):	0.4 L	Weight empty (g):	65 g
Rated water content (Liter)	0.36 L	Weight filled (g):	420 g
External dimensions (mm):	163 x 94 x 34 mm		
Minimum order:	300 units	Pieces per carton:	300
Year base price:	2016	Incoterms:	FOB
Price / unit:	300 units and more: 0.47 USD per unit	Volume per carton (m3):	0.175m3
		Weight per carton (kg):	24 kg
Test report:	WB-11-739	Verification laboratory:	CHEARI
Comments:			
Current PQS status:	<i>pre-qualified ; 30 Jul 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E005: Coolant packs for insulated containers

PQS code:	E005/019
Description:	Water-pack 0.4 L
Manufacturer's reference:	Water-pack 0.4 L
Manufactured in:	Italy
Company:	Colombo Smart Plastic S.p.A Via Battaina 393/C 24059 Ugnano (Bg)
Address:	Italy
Telephone:	+39 035 4188584
Email:	fabiana.podavitte@giostyle.com ; paolini_mattia@yahoo.com
Web address:	www.giostyle.com/

Specifications

Nominal capacity (Liter):	0.4 L	Weight empty (g):	50 g
Rated water content (Liter)	0.38 L	Weight filled (g):	420 g
External dimensions (mm):	165 x 93 x 33 mm		
Minimum order:	64 units	Pieces per carton:	60 units
Year base price:	2016	Incoterms:	EXW
Price / unit:	60 units or more: 0.80 USD per unit	Volume per carton (m3):	0.040 m3
		Weight per carton (kg):	4 kg
Test report:	WHO-10-014	Verification laboratory:	CEMAFROID SAS
Comments:			
Current PQS status:	pre-qualified ; 29 May 2014	Valid until :	May, 2016
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			

E006

Temperature monitoring devices

This section covers thermometers, freeze indicators, temperature recorders, data loggers and event loggers for monitoring temperatures at all levels in the cold chain. It also includes alarm systems. Currently, several of the device types set out below do not yet have pre-qualified examples listed in the catalogue.

E006.1 Device types

A number of new device types are specified under PQS. A few of these were listed in PIS 2000 as untested products. The new devices are highlighted below.

Acoustic and visual alarms (NEW): These can be used in conjunction with fixed dial thermometers and pen recorders.

Cold Chain Monitor cards (CCM): WHO no longer recommends the use of these cards for in-country use. Their use should now be confined to international shipments only, where dry ice is used; otherwise electronic shipping indicators are generally preferred for this purpose.

Freeze indicators: Both electronic and passive phase-change types are now covered by the specification. Freeze indicators should be used routinely for internal distribution of freeze-sensitive vaccines and for monitoring freezing events in cold rooms and vaccine refrigerators where alternative devices are not fitted, or are not thought to be reliable.

Vaccine Vial Monitors (VVM): VVMs are now routinely fixed to all vaccines supplied by UNICEF.

Electronic thermometers: Hand-held electronic thermometers are used by cold chain technicians during repair work, for routine monitoring, for cold chain studies and during the commissioning of cold rooms and freezer rooms.

Fixed dial thermometers: Fixed gas or vapour pressure dial thermometers, require no power supply and they can be used to trigger an alarm system. Their primary use is as a back-up device for cold rooms and freezer rooms. Bi-metallic dial thermometers are no longer recommended because they easily lose their calibration.

Stem thermometers: A stem thermometer should be supplied with every vaccine refrigerator and freezer even when more sophisticated devices are also fitted. They can also be fitted in cold rooms and freezer rooms as a cheap back-up device. Stem thermometers should never be used as the primary temperature monitoring device because they do not provide a continuous record of vaccine temperature exposure.

Bi-metallic dial thermometers are no longer recommended by WHO because they do not hold their calibration well.

Integrated electronic thermometer, with alarm (NEW): This is a new device type which may be built in to a vaccine refrigerator or freezer at the manufacturer's discretion. Its purpose is to provide some of the capabilities of the monitoring equipment used on cold rooms and freezer rooms. This is the only E006 product type of which there are no examples currently on the market.

Event logger systems (NEW): Event logger systems can be supplied with varying levels of sophistication. They consist of a network of sensors linked to a central temperature recording unit, which may be PC-based. Both hard-wired and wireless devices are available. They all include alarm systems. Detailed temperature records can be produced and the most sophisticated systems can be internet-enabled which allows for remote monitoring. Their principal use is at primary store level, but they may also be appropriate for large sub-national stores.

Pen recorders: Pen recorders have been standard equipment for cold rooms and freezer rooms for many years. They continue to have a use for smaller cold rooms and for programmes which are unable to provide the technical support needed to operate and maintain an event logger system.

Temperature data loggers (NEW): Data loggers are used principally during cold chain studies and for verifying performance during the initial commissioning of cold rooms and freezer rooms.

30-day electronic refrigerator temperature loggers (NEW): This is a new device type which can be used to review vaccine refrigerator temperatures over 30 days. The earliest data points are continuously overwritten so that the user always has access to the most recent 30 day period. The devices include a visual temperature alarm and some models allow data to be downloaded to a computer. They are not suitable for use in vaccine freezers. Their use offers the possibility of much improved temperature monitoring at the health facility and lower sub-national levels where routine manual recording is known to be unreliable.

Current models operate for two years after they are activated. Because the product is supplied with sealed-in batteries, the whole unit has to be replaced when the battery runs out. This design approach avoids the need to re-calibrate the device, which is expensive and logistically complex.

Electronic shipping indicators (NEW): Electronic shipping indicators are single-use devices designed to monitor vaccine temperature during international shipment from the manufacturer to the primary store. The data they provide is recorded on the Vaccine Arrival Report (VAR).

E006.2 Use of E006 devices

The following table summarizes the use of each of the E6 device types:

Use of temperature monitoring devices

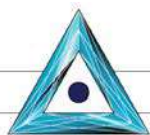
Device category	PQS spec	PRINCIPAL USE LOCATION							Notes
		International shipping	Primary store	Intermediate store	Health facility	Internal distribution	Equipment commissioning	Cold chain studies	
Acoustic/visual alarm	E06/AL01		X	X					Used with E06/TH02 & E06/TR04
Cold Chain Monitor (CCM)	E06/IN02	X							
Freeze indicator	E06/IN03		X	X	X	X		X	
Vaccine Vial Monitor (VVM)	E06/IN05	X	X	X	X	X		X	
Electronic thermometer	E06/TH01						X	X	
Fixed dial thermometer	E06/TH02		X	X					Typically used as a back-up device
Stem thermometer	E06/TH03		X	X	X				
Integrated thermometer	E06/TH06		X	X	X				May be supplied with fridge or freezer
Event logger systems	E06/TR03		X	X					For large well-managed stores. Includes alarm system
Pen recorder	E06/TR04		X	X					For smaller cold or freezer rooms where E06/TR03 is inappropriate
Temperature data logger	E06/TR05						X	X	
Electronic fridge logger	E06/TR06			X	X				
Shipping Indicator	E06/TR07	X							

Note: The table shows the appropriate locations for each type of device. It does not imply that ALL the devices listed for a particular location should be used at the same time.

E006.3 Future developments

Low-cost temperature monitoring systems are being developed which measure and record refrigerator temperatures and use cell phone technology to alert staff when there is a problem. When the refrigerator is too cold or too warm, the device automatically sends an SMS alarm message to facility staff and supervisors.

E006 data sheets follow



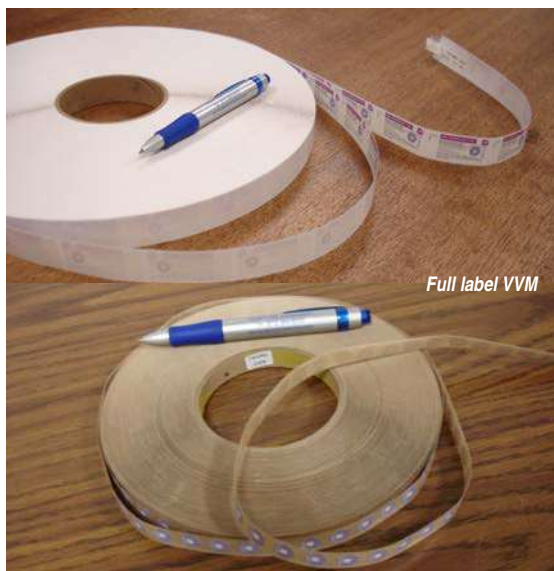
E006: Temperature monitoring devices

PQS code: E006/001

**HEATmarker® Vaccine Vial
Monitor (VVM)**

Manufactured in: USA

Company name:
TEMPTIME Corporation
116 American Road
Morris Plains, NJ 07950
USA
Tel: 001-973-984-6009
Fax: 001-973-984-1835
Email: info@temptimecorp.com
chrisc@temptimecorp.com



Standard Specifications:

Specification	Full Label VVM	Dot VVM
Minimum Order For One (1) Shipment	500,000	50,000
Standard Label Sizes	20mm X 44mm 57mm X 15mm 48mm X 18mm	10mm dot (circle) or 16mm X 10mm Rectangle
Indicators Per Roll	10,000	10,000
Core size	76mm	76mm
Core Size	76mm	76mm
Shipped by Container	LD3 (in one shipment) or Insulated Coolers Depending on Volume	LD3 (in one shipment) or Insulated Coolers Depending on Volume
Number of Label Colors	2	N/A

Standard Material Specifications:

Full Labels are made on a 38#, semi-gloss white, lightweight, calendered, wood free printing paper face sheet. The adhesive of the face sheet can be a rubber based solvent adhesive with a service temperature range of -40°F to +175°F or a rubber based hot melt adhesive with a service temperature range of -50°F to +120°F. The face sheet with adhesive is removed from either a 44# bleached glassine liner or #40 bleached kraft liner.

Dots are made on corona-treated, flexible, opaque white polyolefin film. The adhesive is clear, permanent and designed for prime labeling applications with a service temperature range -40°F to +200°F. The minimum application temperature is +10°F. The face sheet is removed from a 44#, poly-coated natural kraft (brown) paper stock for roll-to-roll applications. This liner is specifically designed for high speed automatic label dispensing applications. The face sheet has a 1mil, polypropylene, clear self-wound overlamine with a permanent acrylic adhesive. This film is not designed for printing.

Method of Application:

The rolls of VVM are suitable for use with high speed automatic labeling equipment.



E006: Temperature monitoring devices

PQS code:	E006/002
Description:	Electronic shipping indicator Q-tag2 plus
Manufacturer's ref:	Q-tag 2 plus
Manufactured in:	Switzerland
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Ganterschwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	20-day electronic shipping indicator	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.028 kg
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+55°C	Dimensions:	5.7 x 5.8 x 1.1 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	± 0.5°C	Min logging interval:	pre-set at 1 mn interval
Power source:	Passive device	Alarm type:	Visual
Battery type:	Lithium non-replaceable battery	User interface:	LCD - Start/Stop button
Battery shelf life:	2 years	Programmability:	Factory programmed
Activated life:	6 months	IP rating:	IP 67
Memory capacity:	---		
Comments:	Q-Tag2 plus is an irreversible electronic temperature indicator that show if a product has been exposed to temperatures beyond assigned alarm settings. There are three types of Q-tag2 plus: 1. Type 1 for freeze sensitive vaccines 2. Type 2 for non-freeze sensitive vaccines 3. Type prevenar 7-valent conjugated vaccine Each type has its own alarm settings Check the specific page in the catalogue for more information		
Minimum order:	50	Year base price:	2015
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	50
Price per unit:	50 - 99 units: 15 € 100 - 999 units: 12 €	Volume per carton:	
		Weight per carton:	1.8 kg
		Incoterms:	EXW
Verification report:	151-04740	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 30 Sep 2007		
		Valid until:	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



CODE E06/02, Electronic temperature monitor Model Q-tag 2 plus

ADDITIONAL COMMENTS

Alarm setting:

Type	TYPE 2: for vaccines: OPV, freeze-dried BCG, measles, MR, MMR, Hib, yellow fever and, Meningitis vaccine	TYPE 1: for vaccines: DTP, DT, TT, Td, Hep B, IPV, liquid Hib and combination vaccines	Type Prevenar: Only for Prevenar 7-valent conjugated vaccine
Alarm settings	>= +45°C 1 hour single >= +30°C 10 hours cumulative >= +10°C 20 hours cumulative	>= +45°C 1 hour single >= +30°C 10 hours cumulative <= -0.5°C 1 hour single	>= +40°C 1 hour single >= +30°C 10 hours cum. <= -0.5°C 1 hour single

Function: Q-tag 2 plus is an irreversible electronic temperature indicator that shows if a product, such as vaccine, has been exposed to temperatures beyond assigned alarm settings described above. It consists of an electronic temperature measuring circuit with associated LCD-display. As long as the temperature is within the allowed range, the OK-sign is shown on the display. If the indicator is exposed to an out-of-range temperature the ALARM-sign appears on the display. Some examples of information that can be displayed are:

1. Actual elapsed transport time with ALARM-sign and violated alarm condition
2. Actual elapsed transport time since start with OK-sign.
3. Extreme temperatures can be read out by every time segment.
4. Exact time since START until the alarm occurrence.

The Q-tag 2 plus device is attached onto a card which provides instructions for senders and receivers. This device has an initial start delay of 1 hour.

For more information please contact the supplier.

Use: This electronic temperature indicator is used to monitor all kind of shipments of vaccines and other perishable goods.

Following languages are available (except Type Prevenar): English (Standard), French, Spanish, Arabic, Russian, Mandarin Chinese



1



2



3



4



E006: Temperature monitoring devices

PQS code:	E006/004
Description:	Cold chain monitor
Manufacturer's ref:	Vaccine cold chain monitor shipment record
Manufactured in:	Switzerland
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Ganterschwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	Cold chain monitor	Display medium:	---
Mode of operation:	Chemical	Weight	0.006 kg
Minimum temperature:		Main material:	Card
Maximum temperature:		Dimensions:	12 x 15 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	N/A	Min logging interval:	N/A
Power source:	Passive device	Alarm type:	Visual
Battery type:	N/A	User interface:	N/A
Battery shelf life:	N/A	Programmability:	Not applicable
Activated life:	N/A	IP rating:	N/A
Memory capacity:	N/A		
Comments:	<p>This indicator is made of a porous wick track strip with 3 windows (A, B, and C) changing colour to blue when temperature exceeds +10°C. In addition it has a high temperature dot activated at +34°C</p> <p>This device is to be used only in international shipments when there is no other choice than having dry ice as the passive coolant</p>		
Minimum order:	500	Year base price:	2007
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	250
Price per unit:	Per unit: 4.30 CHF	Volume per carton:	0.0055 m3
		Weight per carton:	1.7 kg
		Incoterms:	EXW
Verification report:	Wolff Laboratory (1988)	Verification laboratory:	
Current PQS status:	pre-qualified ; 30 Sep 2007	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code: E006/006

Description: User prg temperature data logger

Manufacturer's ref: Logtag TRIX-8

Manufactured in: China; People's Republic of

Company: LogTag Recorders Limited

Address: PO Box 362-95, Northcote, Auckland, New Zealand

Telephone: +64 9 444 5881

Email: sales@logtagrecorders.com

Web address: www.logtagrecorders.com

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LED
Mode of operation:	Electronic	Weight	0.035 kg
Minimum temperature:	-40°C	Main material:	Polycarbonate
Maximum temperature:	+85°C	Dimensions:	8.5 x 5.4 x 0.85 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	± 0.5°C	Min logging interval:	30 seconds
Power source:	Battery 3V	Alarm type:	Visual
Battery type:	Lithium 3V	User interface:	Logtag interface + software
Battery shelf life:	up to 10 years	Programmability:	User programmed
Activated life:	36 months	IP rating:	IP65
Memory capacity:	8000 point		

Comments: The LogTag TRIX18 Temperature Logger is a battery powered stand-alone measurement system for digital time-temperature monitoring. It incorporates a temperature sensor arranged in a recess in the case. This design protects the sensor from damage but still provides a fast reaction time. Using the LogTag interface and LogTag's free available companion software LogTag Analyser, it is easily set up for recording conditions including delayed start, sampling interval, continuous or fixed number of readings and configuration of conditions to activate the ALERT indicator. Readings are downloaded using LogTag Analyser which provides facilities for chart, zoom, and listing data statistics and allows exporting the data to other applications such as Excel. The data downloading requires an external USB based docking station (Logtag interface) not included in the price.

Minimum order:	20	Year base price:	2013
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	50
Price per unit:	20-99 units: 27.40 €	Volume per carton:	0.0051m3
	100+ units: on request to manufacturer	Weight per carton:	1.9 kg
		Incoterms:	EXW

Verification report:	TUV 21123235_001	Verification laboratory:	TUV SUD PSB Pte Ltd
Current PQS status:	pre-qualified ; 22 Jan 2008	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/007
Description:	Electronic freeze indicator
Manufacturer's ref:	Freeze-tag®
Manufactured in:	Malaysia
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Ganterischwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	Irreversible freeze indicator	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.012
Minimum temperature:	-20°C	Main material:	ABS
Maximum temperature:	+50°C	Dimensions:	5.0 x 3.1 x 1.05 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	+/- 0.5°C	Min logging interval:	---
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	non-replaceable battery	User interface:	LCD screen
Battery shelf life:	5 years	Programmability:	Factory programmed
Activated life:	Device always active	IP rating:	IP67
Memory capacity:	---		
Comments:	Freeze-Tag is an irreversible temperature indicator that shows if a product, such as vaccine has been exposed to freezing temperatures. It consists of an electronic temperature measuring circuit with associated LCD-display. If the indicator is exposed to a temperature below -0.5°C ±0.5°C for more then 60min ± 3min the display will change from the "good" status into the "alarm" status. A small blinking dot in the right hand corner of the LED display indicates that the device is functioning.		
Minimum order:	500	Year base price:	2009
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	500
Price per unit:	500 units: 5.30 CHF; 1500 units: 4.60 CHF up to 5000 units: 4.30 CHF 10 000 and more units: 4.00 CHF	Volume per carton:	0.03 m3
		Weight per carton:	7.8 kg
		Incoterms:	EXW
Verification report:	151-04141	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 27 May 2008		
		Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/009
Description:	Electronic freeze indicator
Manufacturer's ref:	FreezeAlert TM
Manufactured in:	China; People's Republic of
Company:	Sensitech Inc.
Address:	A Business Unit of Carrier Corporation, Suite 258X, 800 Cummings Center. Beverly, MA 01915 United States
Telephone:	+1 978 - 927- 7033
Email:	http://www.sensitech.com/contactus
Web address:	http://www.sensitech.com

Specifications

Product type:	Irreversible freeze indicator	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.014 kg
Minimum temperature:	---	Main material:	ABS
Maximum temperature:	+55°C	Dimensions:	5.15 x 3.5 x 1.0 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	+/-0.5°C	Min logging interval:	N/A
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Lithium coin-cell	User interface:	Start button switch
Battery shelf life:	can be stored inactivated for 12 months	Programmability:	Factory programmed
Activated life:	36 months (if stored for maximum 12 months)	IP rating:	IP64
Memory capacity:	N/A		
Comments:	The FreezeAlert™ is a single alarm electronic temperature indicator providing an irreversible display of temperature exposure relative to the alarm setting of < -0.5 °C for a continuous period of 60 minutes. If the indicator is exposed to conditions exceeding the alarm setting, the display changes from a "√" to an "X", informing the user of the triggered alarm state. The device contains an integrated push-button switch for field activation and a dynamic "dot" icon which affirms active monitoring. carton of 1000 units		
Minimum order:	500	Year base price:	2009
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	1000
Price per unit:	500 units: 4.53 US\$; 1000 units: 3.89 US\$ 5000 units: 3.64 US\$ 10 000 units: 3.40 US\$	Volume per carton:	0.066 m3
		Weight per carton:	15.3 kg
		Incoterms:	EXW
Verification report:	S09EEC00004/C/BL/CEG Feb 2009	Verification laboratory:	TUV SUD PSB Pte Ltd
Current PQS status:	pre-qualified ; 03 Mar 2009	Valid until:	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



E006: Temperature monitoring devices

PQS Code: E006/010

Description: Electronic temperature indicator
Manufacturer's reference: VaxAlert™
Manufactured in: China; People's Republic of
Company: Sensitech, Inc.
Address: 800 Cummings Ctr, Suite 258X
Beverly, MA 01915-6197
USA
Telephone: +1-978-927-7033
Fax: +1-978-921-2112
Website: www.sensitech.com
E-Mail: info@sensitech.com

SPECIFICATIONS

Type	<u>Type 1: Vaccines</u> DTP, DT,TT, Td, Hep B, IPV, liquid Hib, and combination vaccines	<u>Type 2: Vaccines</u> OPV, Freeze-dried BCG, measles, MR, MMR, yellow fever, and meningitis vaccines	<u>RotaTeq® from Merck</u>
Alarm settings	≥ +45°C 1 hr single event ≥ +30°C 10 hr cumulative ≤ - 0.5°C 1 hr single event	≥ +45°C 1 hr single event ≥ +30°C 10 hr cumulative ≥ +10°C 20 hr cumulative	≥ +27°C 1 min single event ≥ +17°C 2 hr cumulative ≤ - 25°C 1 min single event

Initial Start Delay: 60 min
Temperature Accuracy: ±0.5 °C
External Dimensions: 98.9 x 58.0 x 17.5 mm (without card)

External Material: ABS
Weight: 68 g/piece
Number per Package: 20

COMMENTS

*Test Report: TUV PSB Singapore Test Reports (S09EEC00004/A/1/BL/CEG, S09EEC00004/B/1/BL/CEG)
Meets performance requirements for WHO PQS/E06/TR07VP.1
TUV SUD America IAO9001:2000, Registration No. 951 05 3305*

Function: VaxAlert™ is an irreversible electronic temperature indicator designed to monitor temperature exposure of vaccines and other perishable products during transit. The indicator provides alarm status and alarm excursion histories for up to three single event or cumulative time-temperature alarms as listed in the table above. The device contains an advanced LCD that presents: comprehensive alarm status (✓ or X), operation mode (ready/run/stop/delay start), elapsed time from start and last temperature reading. Alarm excursion histories (up to nine events) are presented via the LCD with an alarm history event number, alarm indicator, alarm time (elapsed since start), and max or min temperature during the alarm time period.

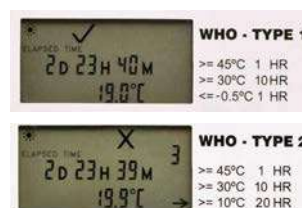
Main purpose of the device: Temperature monitoring vaccine shipments.

2009 PRICES

(Type 1 and Type 2)

20-100 pieces \$ 17.50 / piece
101-1000 pieces \$ 14.00 / piece
1001- 3000 pieces \$ 11.75 / piece
>3000 pieces on request

Shipping volume 0.0044 m³ (254 x 153 x 114 mm)
Shipping weight 20 pcs 6.8 kg
Minimum order: 20 pc



Typical VaxAlert Display

Prequalified on 08 May 2009, revision 10 May 2011



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/013
Description:	30-day electronic temperature logger
Manufacturer's ref:	VaxTag 30-day electronic temperature logger
Manufactured in:	China; People's Republic of
Company:	LogTag Recorders Limited
Address:	PO Box 362-95, Northcote, Auckland, New Zealand
Telephone:	+64 9 444 5881
Email:	sales@logtagrecorders.com
Web address:	www.logtagrecorders.com

Specifications

Product type:	30-day electronic refrigerator temperature logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.043 kg
Minimum temperature:	-30°C	Main material:	Polycarbonate
Maximum temperature:	+60°C	Dimensions:	9.30 x 5.45 x 0.86 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	+/- 0.5°C	Min logging interval:	30 seconds
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Lithium	User interface:	Standard Logtag interface cradle
Battery shelf life:		Programmability:	Not applicable
Activated life:	2-3 years	IP rating:	IP 65
Memory capacity:	7770 data points		
Comments:	Accessories: Standard Logtag Interface (docking station not included in the price) and the Logtag Analyser Software Details of any excursions can be checked directly by inspecting the statistics history on the recorder's display or in more detail by downloading the logged data via a LogTag USB interface to a PC running LogTag Analyzer.		
Minimum order:	20	Year base price:	2013
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	50
Price per unit:	20 - 99 units: 40.80 USD 100+ units: on request	Volume per carton:	0.0051m3
		Weight per carton:	2.5 kg
		Incoterms:	EXW
Verification report:	A66604	Verification laboratory:	Intertek UK
Current PQS status:	<i>pre-qualified ; 19 May 2011</i> Valid until: <i>May, 2018</i>		

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

CODE E006/014

Electronic temperature monitor Model Q-tag® CLm

COMPANY NAME AND ADDRESS

Berlinger & Co AG
Mitteldorfstrasse 2
CH-9608 Ganterschwil
Switzerland
Telephone: 41 (71) 982 88 11
Fax: 41 (71) 982 88 39
E-mail: info@berlinger.ch
Internet: www.berlinger.com



SPECIFICATIONS

TYPE 2: for vaccines:

OPV, freeze-dried BCG, measles,
MR, MMR, Hib, yellow fever and,
Meningitis vaccines

$\geq +45^{\circ}\text{C}$ 1 hour single
 $\geq +30^{\circ}\text{C}$ 10 hours cumulative
 $\geq +10^{\circ}\text{C}$ 20 hours cumulative

TYPE Rotateq:

Only for Rotateq

$\geq +27^{\circ}\text{C}$ 1 minute single
 $\geq +17^{\circ}\text{C}$ 2 hours cumulative
 $\leq -25^{\circ}\text{C}$ 1 minute single

TYPE 1: for vaccines:

DTP, DT, TT, Td, Hep B, IPV,
liquid Hib and combination vaccines

$\geq +45^{\circ}\text{C}$ 1 hour single
 $\geq +30^{\circ}\text{C}$ 10 hours cumulative
 $\leq -0.5^{\circ}\text{C}$ 1 hour single

Type Prevenar:

Only for Prevenar

7-valent conjugated vaccines

$\geq +40^{\circ}\text{C}$ 1 hour single
 $\geq +30^{\circ}\text{C}$ 10 hours cum.
 $\leq -0.5^{\circ}\text{C}$ 1 hour single



OK display



Alarm display



Read out display with exact
alarm date, time and duration

Initial start delay	1 hour
Accuracy of temperature threshold	$\pm 0.5^{\circ}\text{C}$
External dimensions	55 x 95 x 10 mm (without card)
Number per package	50

Material	ABS
Weight	35 gr.

COMMENTS

Test report: Roth & Co., official accredited laboratory from Metas (Measurement report No VA11-02742 B / 19th March 2012)
Meets Performance – WHO/PQS/E06/TR07.1SGS-ISO 9001:2008 Certification since May 1999, last audit 5th May 2011

Function: Q-tag® CLm is an irreversible electronic temperature indicator that shows if a product, such as vaccine, has been exposed to temperatures beyond assigned alarm settings described above. It consists of an electronic temperature measuring circuit with associated LCD-display. As long as the temperature is within the allowed range, the OK-sign (✓) is shown on the display. If the indicator is exposed to an out-of-range temperature the ALARM-sign (X) appears on the display.

The Q-tag® CLm device is attached onto a card which provides instructions for senders and receivers. The following languages are available (except Type Prevenar and Rotateq): English (Standard), French, Spanish, Arabic, Russian, Mandarin Chinese

Use: This electronic temperature indicator is used to monitor all kind of shipments of vaccines and other perishable goods.

2012 PRICES (Ex Works)

Type 1 and Type 2

50 to 99 pieces	EURO 13.50 / piece
100 to 999 pieces	EURO 11.00 / piece
1000 to 2500 pieces	EURO 9.50 / piece
Above 2500 pieces	on request

Type Prevenar and Rotateq
on request



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code: E006/015

Description: Electronic freeze indicator Q-Tag Quad

Manufacturer's ref: Q-Tag Quad

Manufactured in: Switzerland

Company: Berlinger & Co. AG

Address: Mitteldorfstrasse 2,
CH-9608 Ganterschwil,
Switzerland

Telephone: +41 (71) 982 88 11

Email: info@berlinger.com

Web address: <http://www.berlinger.com>

Specifications

Product type:	Irreversible freeze indicator	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.018 kg
Minimum temperature:	- 30°C	Main material:	ABS
Maximum temperature:	+ 55°C	Dimensions:	5.3 x 3.9 x 1.1 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	+/- 0.5 °C	Min logging interval:	Preset 1 minute
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	CR Lithium	User interface:	LCD stop/Start button
Battery shelf life:	60 mths (5 years)	Programmability:	Factory programmed
Activated life:	60 mths (5 years)	IP rating:	IP 67
Memory capacity:	N/A		
Comments:	Function: This irreversible temperature indicator consists of an electronic temperature measuring circuit with associated LCD-display. If the indicator is exposed to temperature below - 0.5°C for more than 60min ±3 min the display will change from the "good" status symbol (✓) into the "alarm" status symbol (x). A small blinking dot in the right hand corner of the LED display indicates that the device is functioning. The Q-Tag® Quad can also be programmed with up to 4 different alarm events for upper and lower temperatures.		
Minimum order:	500	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	100
Price per unit:	9.80 USD per unit for 500 units	Volume per carton:	0.04 m3
	7.20 USD per unit for 1000 units	Weight per carton:	10.8 kg
	above 1000 units on request	Incoterms:	EXW
Verification report:	VA11-02742 A	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 29 Jun 2012		
		Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY

CODE E006/016**Electronic temperature monitor
Model Q-tag® CLm doc****COMPANY NAME AND ADDRESS**

Berlinger & Co AG
Mitteldorfstrasse 2
CH-9608 Ganterschwil
Switzerland

Telephone: 41 (71) 982 88 11
Fax: 41 (71) 982 88 39
E-mail: info@berlinger.ch
Internet: www.berlinger.com

**SPECIFICATIONS****TYPE 2: for vaccines:**

OPV, freeze-dried BCG, measles,
MR, MMR, Hib, yellow fever and,
Meningitis vaccine

$\geq +45^{\circ}\text{C}$ 1 hour single
 $\geq +30^{\circ}\text{C}$ 10 hours cumulative
 $\geq +10^{\circ}\text{C}$ 20 hours cumulative

TYPE Rotateq:

Only for Rotateq

$\geq +27^{\circ}\text{C}$ 1 minute single
 $\geq +17^{\circ}\text{C}$ 2 hours cumulative
 $\leq -25^{\circ}\text{C}$ 1 minute single

TYPE 1: for vaccines:

DTP, DT, TT, Td, Hep B, IPV,
liquid Hib and combination
vaccines

$\geq +45^{\circ}\text{C}$ 1 hour single
 $\geq +30^{\circ}\text{C}$ 10 hours cumulative
 $\leq -0.5^{\circ}\text{C}$ 1 hour single

Type Prevenar:

Only for Prevenar

7-valent conjugated vaccines

$\geq +40^{\circ}\text{C}$ 1 hour single
 $\geq +30^{\circ}\text{C}$ 10 hours cum.
 $\leq -0.5^{\circ}\text{C}$ 1 hour single



OK display



Alarm display

Stopped device
with USB interface

Initial start delay	1 hour
Accuracy of temperature threshold	$\pm 0.5^{\circ}\text{C}$
External dimensions	55 x 95 x 10 mm (without card)
Number per package	50

Material	ABS
Weight	40 gr.

COMMENTS

Test report: Roth & Co., official accredited laboratory from Metas. (Measurement report No VA11-02742 C / 19th March 2012)
Meets Performances – WHO/PQS/E06/TR07.1- SGS-ISO 9001:2008 - prequalification valid until May 2015

Q-tag® CLm doc is an irreversible electronic temperature indicator that shows if a product, such as vaccine, has been exposed to temperatures beyond assigned alarm settings described above. It consists of an electronic temperature measuring circuit with associated LCD-display. As long as the temperature is within the allowed range, the OK-sign (✓) is shown on the display. If the indicator is exposed to an out-of-range temperature the ALARM-sign (X) appears on the display. Further more you have a **USB interface and the device will create a PDF document with all relevant temperature data including temperature graph. No additional software needed. The version Q-tag® CLm VAR of this same device, capable of providing the vaccine arrival form, is under development.**

The Q-tag® CLm doc device is attached onto a card which provides instructions for senders and receivers. The following languages are available (except Type Prevenar and Rotateq): English (Standard), French, Spanish, Arabic, Russian, Mandarin Chinese

Use: This electronic temperature indicator is used to monitor all kind of shipments of vaccines and other perishable goods.

2012 PRICES (Ex Works)**Type 1 and Type 2**

100 to 599 pieces	EURO 23.60 / piece
600 to 1199 pieces	EURO 20.00 / piece
Upon 1200 pieces	on request

Type Prevenar and Rotateq

on request



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/019
Description:	Remote Temperature Monitoring Device
Manufacturer's ref:	SmartView
Manufactured in:	Netherlands
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Ganterschwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	Remote Temperature Monitoring System	Display medium:	computer online
Mode of operation:	Electronic	Weight	
Minimum temperature:	-40°C	Main material:	Metals and ABS
Maximum temperature:	+85°C	Dimensions:	

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	±0.5°C	Min logging interval:	2 sec
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Lithium	User interface:	web based system
Battery shelf life:	3 years	Programmability:	User programmed
Activated life:	36 mths	IP rating:	IP 67
Memory capacity:	8192 data points		

Comments:

Request for a quotation. Delivery lead time: 16 to 20 weeks subjected to changes
RF receiver and GPRS internet gateway
Use: Real time cold room or facility temperature monitoring
Function: Wireless monitoring network: An easy to install wireless network provides the wireless communication for continuous monitoring. This network communicates with battery operated wireless temperature sensors that will be placed in storage facilities. These sensors contain a temperature and/or humidity sensor, but also function as wireless data loggers. The measured data is uploaded to and analyzed by a secured central data base. In case of a temperature excursion or a door left open in your cold room or facility, a flashing light turns on as well as automated e-mail and or SMS alert are going to be send out to user configurable addresses.
SmartView web application: A flexible web-based software platform that collects data from various locations into an integrated real-time view. The software platform creates real-time visibility, alerts, history reports, analysis and is accessible via Login and Password through your web browser without installation of any software.
Indicative prices include the use of online Smartview software, all hardware and SMS and GPRS data for 3 years, without installation, training and travel expenses nor local maintenance and services.

Minimum order:		Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	
Price per unit:	Small (1 cold room 10m3): 8245.00 USD	Volume per carton:	
	Medium (4 cold rooms 10m3): 12,213.00 USD	Weight per carton:	
	Large (10 cold rooms 10m3): 23,149.00 USD	Incoterms:	EXW
Verification report:		Verification laboratory:	METAS
Current PQS status:	<i>pre-qualified ; 24 Jan 2013</i>	Valid until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code: E006/020

Description: 30 day electronic temperature logger

Manufacturer's ref: Fridge-tag 2®

Manufactured in: Switzerland

Company: Berlinger & Co. AG

Address: Mitteldorfstrasse 2,
CH-9608 Ganterschwil,
Switzerland

Telephone: +41 (71) 982 88 11

Email: info@berlinger.com

Web address: <http://www.berlinger.com>

Specifications

Product type:	30-day electronic refrigerator temperature logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.096 kg
Minimum temperature:	-20°C	Main material:	Non-corrodible plastic (ABS)
Maximum temperature:	+55°C	Dimensions:	12.8 x 7.5 x 1.6 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	±0.5°C	Min logging interval:	1 min
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Lithium non-replaceable	User interface:	LCD
Battery shelf life:	up to 3 years	Programmability:	Factory programmed
Activated life:	42	IP rating:	64
Memory capacity:	N/A		

Comments:

Function: An irreversible temperature indicator for refrigerators that shows if a product, such as vaccine, has been exposed to temperatures beyond assigned alarm settings described above. As long as the temperature is within the allowed range, the OK sign is shown on the display. If the indicator is exposed to an out-of-range temperature the ALARM sign appears on the display. The device shows the actual temperature in degrees Celsius or Fahrenheit, all alarm violations over the previous 30 days (on a rolling basis), the daily minimum and maximum temperature of the last 30 days, and the time duration of any violation. Useful life is 3 years approx. Furthermore, the Fridge-tag® 2 has a USB interface and can be connected to every PC, Laptop or Mac. Without any installation of software, the Fridge-tag® 2 will generate a PDF document with a 60 days report which includes all relevant information per day such as Min./Max. and average temperatures, time out of range, alarm history etc.

Use: This electronic temperature indicator is used to monitor the correct storage temperature of vaccines and other perishable goods. The fridge-tag 2 can operate with either the built in sensor or with an external sensor with or without a glycol filled bottle

Minimum order:	20	Year base price:	2013
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	32
Price per unit:	20 - 49 units: 44.00USD; 50 - 99 units: 38.00USD; 100 - 999 units: 31.00USD; 1000 - 9999 units: 25.50USD; more units: 23.000USD	Volume per carton:	0.009 m3
		Weight per carton:	4.63 kg
		Incoterms:	EXW
Verification report:	VA 13-00120	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 31 Jan 2013	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/021
Description:	20 day electronic shipping indicator
Manufacturer's ref:	TIC20
Manufactured in:	China; People's Republic of
Company:	LogTag Recorders Limited
Address:	PO Box 362-95, Northcote, Auckland, New Zealand
Telephone:	+64 9 444 5881
Email:	sales@logtagrecorders.com
Web address:	www.logtagrecorders.com

Specifications

Product type:	20-day electronic shipping indicator	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.0293 kg
Minimum temperature:	-30°C	Main material:	Polycarbonate
Maximum temperature:	+55°C	Dimensions:	7.33 x 5.45 x 0.83 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	±0.5°C ((-5 to 25°C)	Min logging interval:	6 min
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	LiMg non replaceable	User interface:	LCD
Battery shelf life:	1 1/2 year	Programmability:	Factory programmed
Activated life:	stops after 20 days	IP rating:	65
Memory capacity:	N/A		
Comments:	<p>The LogTag TIC20 is a irreversible electronic temperature indicator for use in monitoring temperature & time statistics in pharmaceutical transport applications of up to 20 days duration and is factory pre-configured to monitor a range of standard vaccines. Provides clear indication of temperature history/alarm status at all times. Push button Start and Stop. Push Review button to display daily statistics in sequence. Data can be downloaded via an interface cradle (docking station not included in price) to LogTag Analyzer software if required.</p> <p>Order codes :</p> <p>TIC20-W1 : WHO Type 1 alarm configuration for freeze sensitive vaccines (DTP, DT, TT, Td, HepB, IPV, liquid Hib and combination vaccines, MenAfriVac, HPV, Pneumo (other than Prevenar)).</p> <p>TIC20-W2 : WHO Type 2 alarm configuration suitable for the international shipment of BCG, lyophilized Hib, measles, MR, MMR, meningitis (polysaccharide), OPV, rabies, rotavirus (other than rotateq) and yellow fever vaccines shipped with frozen icepacks.</p> <p>TIC20-WR : WHO type Rotateq only</p> <p>TIC20-WP : WHO type Prevenar only for Prevenar 7-valent conjugated vaccine (4 packs = 200 units, 0.031m3, 8.5kg)</p>		
Minimum order:	20	Year base price:	2013
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	50
Price per unit:	20-49 units: 24.00 USD 50+units: on request	Volume per carton:	0.006m3
		Weight per carton:	2kg
		Incoterms:	FOB
Verification report:	7191045935-EEC12/02	Verification laboratory:	TUV SUD PSB Pte Ltd
Current PQS status:	pre-qualified ; 06 Mar 2013	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/022
Description:	User programmable temperature data logger CB
Manufacturer's ref:	LIBERO CB
Manufactured in:	Switzerland
Company:	ELPRO-BUCHS AG
Address:	Langaulistrasse 62 9470 Buchs Suisse
Telephone:	+41 81 750 03 11
Email:	swiss@elpro.com
Web address:	http://www.elpro.com/

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.038 kg
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+80°C	Dimensions:	9.6 x 3.7 x 1.1 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	± 0.3°C	Min logging interval:	1 min, user programmable
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	CR Lithium	User interface:	USB for computer
Battery shelf life:	min 1 year (no activation)	Programmability:	User programmed
Activated life:	12 months	IP rating:	65
Memory capacity:	8800 data points		

Accessories:
* freeware
- liberoCONFIG - Configuration Software*
- LIBERO SmartStart - Quick Configuration Tool*
- liberoMANAGER - Online Cold Chain Database
- elproVIEWER - Analysis Software*
- elproASSISTANT - Task Manager

Comments: The LIBERO CB PDF Logger is a single use data logger that automatically generates an evaluation report in PDF format upon connection to a USB port. No equipment and no software required to read out logger. Release products based on the OK or ALARM status on the display, retrieve the PDF report and forward it to the sender for further analysis or archive it locally. Key features: - 2 temperature thresholds with alarm delay; - Alarm on Mean Kinetic Temperature (MKT)
- Alarm on duration / logging time; - Customizable text area for additional information (e.g. shipment information, instructions for recipient, etc.); - Chart visualizing the temperature curve and alarm limits

Minimum order:	40	Year base price:	2013
Quality standard:	- ISO 9001:2008 - ISO 17025 -	Pieces per carton:	40
Price per unit:	40+ = 30.00USD; 120+ = 28.50USD 600+ = 27.00USD; 1000+ = on request	Volume per carton:	0.003m3
		Weight per carton:	1.67kg
		Incoterms:	EXW
Verification report:	SAS SCS 25 March 2010	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 10 Jul 2013	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/023
Description:	User programmable temperature data logger CS
Manufacturer's ref:	LIBERO CS
Manufactured in:	Switzerland
Company:	ELPRO-BUCHS AG
Address:	Langaulistrasse 62 9470 Buchs Suisse
Telephone:	+41 81 750 03 11
Email:	swiss@elpro.com
Web address:	http://www.elpro.com/

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.038kg
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+80°C	Dimensions:	9.6 x 3.7 x 1.1 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	± 0.3°C	Min logging interval:	1 min, user programmable
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	CR Lithium	User interface:	USB for computer
Battery shelf life:	min 1 year (no activation)	Programmability:	User programmed
Activated life:	1 year	IP rating:	IP 65
Memory capacity:	8800 data		

Accessories:
* freeware
- liberoCONFIG - Configuration Software*
- LIBERO SmartStart - Quick Configuration Tool*
- liberoMANAGER - Online Cold Chain Database
- elproVIEWER - Analysis Software*
- elproASSISTANT - Task Manager

Comments: The LIBERO CS PDF Logger is a single use data logger with multiple alarm levels that automatically generates an evaluation report in PDF format upon connection to a USB port. No equipment and no software required to read out logger. Release products based on the OK or ALARM status on the display, retrieve the PDF report and forward it to the sender for further analysis or archive it locally.
Key features: - up to 8 temperature alarm levels with single or cumulative delays; Alarm on Mean Kinetic Temperature (MKT); Alarm on duration / logging time; Customizable text area for additional information (e.g. shipment information, instructions for recipient, etc.); Chart visualizing the temperature curve and alarm limits

Minimum order:	40	Year base price:	2013
Quality standard:	- ISO 9001:2008 - ISO 17025 -	Pieces per carton:	40
Price per unit:	40+ = 40.00USD; 120+ = 38.00USD 600+ = 36.00USD 1000+ = on request to manufacturer	Volume per carton:	0.003m3
		Weight per carton:	1.67 kg
		Incoterms:	EXW
Verification report:	SAS SCS 122	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 11 Jul 2013	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/024
Description:	User programmable temperature data logger Ti1
Manufacturer's ref:	LIBERO Ti1
Manufactured in:	Switzerland
Company:	ELPRO-BUCHS AG
Address:	Langaulistrasse 62 9470 Buchs Suisse
Telephone:	+41 81 750 03 11
Email:	swiss@elpro.com
Web address:	http://www.elpro.com/

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.038kg
Minimum temperature:	-35°C	Main material:	ABS
Maximum temperature:	+70°C	Dimensions:	9.5 x 4.0 x 1.2 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	±0.2°C core range	Min logging interval:	1 min, user programmable
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Li-Mn	User interface:	USB for computer
Battery shelf life:	14 months (no activation)	Programmability:	User programmed
Activated life:	400 days	IP rating:	65
Memory capacity:	16,000 data points		

Accessories:
* freeware
- liberoCONFIG - Configuration Software*
- LIBERO SmartStart - Quick Configuration Tool*
- liberoMANAGER - Online Cold Chain Database
- elproVIEWER - Analysis Software*
- elproASSISTANT - Task Manager

Comments: The LIBERO Ti1 PDF Logger is a multi use data logger with multiple alarm levels that automatically generates a report in PDF format upon connection to a USB port. No equipment and no software is required to read out logger. Release products based on the OK or ALARM status on the display, retrieve the PDF report and forward it to the sender for further analysis or archive it locally.
Key features:
- up to 6 temperature alarm levels with single or cumulative delays
- Customizable text area for additional information (e.g. shipment information, instructions, etc.)
- Chart visualizing the temperature curve and alarm limits

Minimum order:	10	Year base price:	2013
Quality standard:	- ISO 9001:2008 - ISO 17025 -	Pieces per carton:	10
Price per unit:	10+ = 150USD; 50+ = 142.50USD; 100+ = 138.00USD 250+ = 132.00USD; 500+ = 127.50USD; 1000+ on request	Volume per carton:	0.002m3
		Weight per carton:	0.5kg
		Incoterms:	EXW
Verification report:	SAS 122	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 11 Jul 2013	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/027
Description:	User Programmable Data Logger
Manufacturer's ref:	LIBERO CI
Manufactured in:	Switzerland
Company:	ELPRO-BUCHS AG
Address:	Langaulistrasse 62 9470 Buchs Suisse
Telephone:	+41 81 750 03 11
Email:	swiss@elpro.com
Web address:	http://www.elpro.com/

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.038 kg
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+80°C	Dimensions:	9.60 x 3.70 x 1.10 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	±3°C in core range	Min logging interval:	1min
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Li-Mn	User interface:	LCD screen and USB
Battery shelf life:	At least one year no activation	Programmability:	User programmed
Activated life:	12 mths (single-use device)	IP rating:	65
Memory capacity:	8800 data points		
Comments:	<p>This single-use logger can be used for in-country shipment of vaccines or route validation. It has a built-in PDF file generator. It automatically establishes an evaluation report (No graph nor raw data) on alarms upon connection to a USB port. Complies with the ISO standard 19'005-1 Document Management for the long-term preservation of electronic documents (PDF/A) and 21 CFR Part 11.</p> <p>It allows:</p> <ul style="list-style-type: none"> - Customizable report title and filename - Text area for additional information (e.g. shipment, instructions for recipient, etc.) - Immediate release or quarantine based on alarm status - Statistics (min / max, average, alarm) - Detailed indicator information (ID, configuration etc.) <p>This single-use device is to be used in the 12 months after manufacturing.</p>		
Minimum order:	40	Year base price:	2014
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	40
Price per unit:	40-119 units: 20.00USD 120-599 units: 19.00USD 600-999 units: 18.00USD; 1000+ units on request	Volume per carton:	0.003m3
		Weight per carton:	1.67kg
		Incoterms:	EXW
Verification report:	SAS SCS 13 July 2013	Verification laboratory:	METAS
Current PQS status:	pre-qualified ; 29 Jan 2014	Valid until:	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/028
Description:	User programmable temperature data logger
Manufacturer's ref:	TT4 USB Multi-Alarm Monitor
Manufactured in:	China; People's Republic of
Company:	Sensitech Inc.
Address:	A Business Unit of Carrier Corporation, Suite 258X, 800 Cummings Center. Beverly, MA 01915 United States
Telephone:	+1 978 - 927- 7033
Email:	http://www.sensitech.com/contactus
Web address:	http://www.sensitech.com

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	71 grams
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+70°C	Dimensions:	10.0cm L x 5.5cm W x 2.1cm H

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	±0.5°C(-20°C to 45°C); ±1.0°C(-30°C to -20°C); option ±0.2°C at 0°C	Min logging interval:	10 seconds
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	3.6 V lithium battery	User interface:	LCD + PC interfaceUSB 2.0
Battery shelf life:	1 year	Programmability:	User programmed
Activated life:	12 months	IP rating:	IP67
Memory capacity:	16000 data points		

Comments:	TT4 USB Multi-Alarm monitor (single use) offers a highly flexible alarm design that provides users the ability to program up to six (6) independent time-and-temperature alarm thresholds that can be any combination of four (4) different alarm types: 1). Single temperature limit (high or low) 2). Single Temperature Range Alarm consisting of a lower and upper temperature limit 3). Dual Temperature Range Alarm that links two temperature ranges to the same time threshold and 4). Time only Alarm. Included in the downloaded time-and-temperature data is the NIST traceable Certificate of Validation.		
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Minimum order:	20	Year base price:	2014
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	20
Price per unit:	20-100 units: 37.50 USD; 101-500 units: 35.50 USD	Volume per carton:	0.0044 m3
	501-1000 units: 35.25 USD	Weight per carton:	1.4 kg
	>1000 units: on request	Incoterms:	EXW
Verification report:	PO:37450; JN: T-49508-11	Verification laboratory:	Tektronix Service Solutions
Current PQS status:	pre-qualified ; 04 Jul 2014		
		Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/029
Description:	20 day electronic shipping indicator
Manufacturer's ref:	VaxAlertTM USB
Manufactured in:	China; People's Republic of
Company:	Sensitech Inc.
Address:	A Business Unit of Carrier Corporation, Suite 258X, 800 Cummings Center, Beverly, MA 01915 United States
Telephone:	+1 978 - 927- 7033
Email:	http://www.sensitech.com/contactus
Web address:	http://www.sensitech.com

Specifications

Product type:	20-day electronic shipping indicator	Display medium:	LCD
Mode of operation:	Electronic	Weight	70.9g
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+55°C	Dimensions:	10.1 x 5.6 x 1.96

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	±0.5°C between -5°C and +25°C	Min logging interval:	pre-set 2 min
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	3.6V Lithium	User interface:	LCD and PC downloadable
Battery shelf life:	24 mths	Programmability:	Factory programmed
Activated life:	12 mths	IP rating:	64
Memory capacity:	16 000 data points		

Comments:

Sensitech Inc.'s most advanced electronic temperature shipping indicator integrates multi-alarm cold chain monitoring with detailed time-temperature alarm excursion history information. This advanced indicator enables logistics staff, receivers and quality assurance personnel to determine if and when cold chain breaks occur in the supply chain. The user-friendly liquid crystal display (LCD) combines complete alarm status information with an alarm time-stamp record and the maximum or minimum temperature.

The indicators are factory configured with WHO established alarm profiles in support of UNICEF vaccine procurement and transport requirements. These cost-effective, single-use indicators monitor up to three time-temperature alarms, which can be tailored to specific cold chain transport monitoring requirements beyond WHO/UNICEF vaccine shipments. Its main features are: Automatic generation of Adobe® PDF cold chain data report; Integrated USB connector; Two types of alarms: (1) Single event alarms are triggered if temperature exceeds threshold for a contiguous time period, (2) Cumulative time event alarms are triggered if temperature exceeds threshold for a total sum of time. User-friendly three button interface and intuitive display enables immediate accept/reject decision making and detailed excursion history information. Alarm "time stamp" records elapsed time at point of alarm events, allowing supply chain partners to analyze variability and institute corrective actions.

Minimum order:	20	Year base price:	2014
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	20
Price per unit:	19.00€ per unit	Volume per carton:	
		Weight per carton:	1.04
		Incoterms:	EXW
Verification report:	ACS-E14535	Verification laboratory:	
Current PQS status:	pre-qualified ; 18 Dec 2014	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E006: Temperature monitoring devices

PQS code:	E006/030
Description:	Electronic Shipping Indicator
Manufacturer's ref:	Q-Tag® CLm doc L
Manufactured in:	Switzerland
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Ganterschwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	20-day electronic shipping indicator	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.04
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+60°C	Dimensions:	9.3 x 5.4 x 1.2
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	±0.5°C	Min logging interval:	1 min to 1 hour
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	CR Lithium	User interface:	LCD + PC downloadable
Battery shelf life:	3.5 years	Programmability:	Factory programmed
Activated life:	2.5 year if activated after 1 year	IP rating:	IP65
Memory capacity:	38000		
Comments:	The Q-tag @CLm doc L is an irreversible electronic temperature monitoring device for international shipments of vaccines. It shows if a vaccine has been exposed to temperatures beyond assigned alarms settings. This information can be retrieved on the visible LCD screen or in the generated PDF report. It also has a USB interface and the device will create a pdf document with all relevant temperature data including a temperature graph. The frequency of data points recorded is one minute and the memory has a capacity of 38000. No additional software is required. (For more information see in the pdf downloadable catalogue).		
Minimum order:	100	Year base price:	2015
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	42
Price per unit:	18.50 € per unit	Volume per carton:	
		Weight per carton:	1.7kg
		Incoterms:	EXW
Verification report:	VA15-0238-10 by Roth & Co AG	Verification laboratory:	
Current PQS status:	pre-qualified ; 17 Apr 2015	Valid until:	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



E006: Temperature monitoring devices

PQS code:	E006/031
Description:	User Programmable Temperature Logger (single use)
Manufacturer's ref:	Q-Tag® CLm doc Logger
Manufactured in:	Switzerland
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Ganterschwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.040
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+60°C	Dimensions:	9.3 x 5.4 x 1.2

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	± 0.5°C	Min logging interval:	1min to 1 hour
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	CR Lithium	User interface:	LCD downloadable to PC via USB port
Battery shelf life:	2 years	Programmability:	User programmed
Activated life:	1 year	IP rating:	IP 65
Memory capacity:	38000		

Comments:

The Q-tag® CLm doc Logger (Single use) is a multi-alarm temperature data logger. It can be set totally individually according to customer specifications either pre- or self- configured. Temperature and time alarm conditions can be defined as cumulative or single event. Due to its easy handling the status of the device is immediately readable. This information can be retrieved on the visible LCD screen or in the generated pdf report. It also has a USB interface and the device will create a pdf document with all relevant temperature data results including a temperature graph. The frequency data points recorded can be defined from 1 to 60 minutes and the memory has the capacity of 38000 data points; with a recording time of 15 min, the device can record continuously over 1 year. No additional software is required. For more information see in the pdf downloadable catalogue.
All devices are delivered with a NIST/ILAC traceable certificate.

Minimum order:	50	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	50
Price per unit:	50 - 100 units: 37.3 USD 101 - 500 units: 32.40 USD 501 - 1000 units: 27.50 USD	Volume per carton:	
		Weight per carton:	2.1kg
		Incoterms:	EXW
Verification report:	VA15-0238-10	Verification laboratory:	
Current PQS status:	pre-qualified ; 20 Apr 2015	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/032
Description:	User Programmable Temperature Logger (multi-use)
Manufacturer's ref:	Q-Tag® CLm doc LR
Manufactured in:	Switzerland
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Gantereschwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	User-programmable temperature data logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.040
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+60°C	Dimensions:	9.3 x 5.4 x 1.2
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	± 0.5°C	Min logging interval:	1 minute to 1 hour
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	CR Lithium	User interface:	LCD downloadable to PC via USB port
Battery shelf life:	3.5 years	Programmability:	User programmed
Activated life:	2.5 years if activated after 1 year	IP rating:	IP 65
Memory capacity:	38000		
Comments:	<p>The Q-tag® CLm doc Logger R (Multi use) is a multi-alarm temperature data logger. It can be set totally individually according to customer specifications either pre- or self- configured. Temperature and time alarm conditions can be defined as cumulative or single event. Due to its easy handling the status of the device is immediately readable. This information can be retrieved on the visible LCD screen or in the generated pdf report. It also has a USB interface and the device will create a pdf document with all relevant temperature data results including a temperature graph. The frequency data points recorded can be defined from 1 to 60 minutes and the memory has the capacity of 38000 data points; with a recording time of 15 min, the device can record continuously over 1 year. No additional software is required. For more information see in the pdf downloadable catalogue.</p> <p>All devices are delivered with a NIST/ILAC traceable certificate.</p>		
Minimum order:	42	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	42
Price per unit:	50 - 100 units: 75.45 USD 101 - 500 units: 69.20 USD 501 - 1000 units: 60.80 USD	Volume per carton:	
		Weight per carton:	2.1kg
		Incoterms:	EXW
Verification report:	VA-15-0238-10	Verification laboratory:	
Current PQS status:	pre-qualified ; 20 Apr 2015	Valid until:	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/033
Description:	Local Temperature Monitoring System
Manufacturer's ref:	MULTILOG2 TM Temperature Data Logger
Manufactured in:	United Kingdom
Company:	Remonsys Ltd
Address:	The Stables, Church Hanborough Witney Oxon OX29 8AB United Kingdom
Telephone:	+44 (0) 1993 886996
Email:	info@remonsys.com
Web address:	http://www.remonsys.com/

Specifications

Product type:	Local Temperature Monitoring System	Display medium:	LCD
Mode of operation:	Electronic	Weight	1
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	+60°C	Dimensions:	20.0 x 11.0 x 6.0
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	± 0.2°C 0 to 10°C	Min logging interval:	1 min
Power source:	Rechargeable batteries	Alarm type:	Acoustic
Battery type:	NiMH battery packs	User interface:	Visual current T° on LCD + visual on computer
Battery shelf life:	3 years	Programmability:	User programmed
Activated life:	72 hours without charge	IP rating:	IP54
Memory capacity:	1000 recording per sensor		
Comments:	The MULTILOG2 is a battery operated data logger that records data from up to 24 sensors that can be configured as analogue or digital sensors. It acts as a base station and data is transmits by wire to an always-on PC to which it is connected via USB and allows inspection of the data via Instant Monitor visual warning of alarms and by SMS messaging, automatic downloading of data to the PC as well as recharging the batteries to ensure recording continues in the event of a power outage. Options: Sensors – analogue; Sensors - digital door switch; Integrated GSM/GPRS Modem; Temperature sensors on 20m leads but option to extend to 200m without loss of precision		
Minimum order:	1	Year base price:	2015
Quality standard:	- ISO 9001:2008 - Other -	Pieces per carton:	1
Price per unit:	1830€ Multilog2 control box (see price components)	Volume per carton:	0.012m3
		Weight per carton:	3kg
		Incoterms:	EXW
Verification report:	PARC-5095	Verification laboratory:	
Current PQS status:	pre-qualified ; 07 May 2015	Valid until:	May, 2018
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/034
Description:	Dial Thermometer
Manufacturer's ref:	Budenberg 96FG
Manufactured in:	United Kingdom
Company:	Budenberg Gauge Company Ltd
Address:	4 Gilchrist Road, Northbank Ind Park Irlam, Manchester M44 5 AY United Kingdom
Telephone:	+44 1617777300
Email:	John.White@budenberg.co.uk
Web address:	www.budenberg.co.uk

Specifications

Product type:	Fixed gas or vapor pressure thermometer	Display medium:	Dial
Mode of operation:	Physical	Weight	0.6kg
Minimum temperature:	-40°C	Main material:	Stainless steel
Maximum temperature:	+40°C	Dimensions:	0.68 x 1.10
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	± 1% scale	Min logging interval:	N/A
Power source:	Passive device	Alarm type:	Not applicable
Battery type:	N/A	User interface:	Direct reading
Battery shelf life:	N/A	Programmability:	Not applicable
Activated life:	N/A	IP rating:	IP54
Memory capacity:	N/A		
Comments:	This device is a gas filled thermometer with capillary tube for wall mounting with rear fixing lugs. It has a waterproof bezel ring with bayonet lock. Head and bezel : AISI 316 Capillary length : 1.5 meters; capillary materials : AISI 316 with PVC covering. Bulb : Ø 8mm. AISI 316, length 100mm Red lazy pointer for maximum indication, optional blue lazy pointer for minimum indication		
Minimum order:	10	Year base price:	2015
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	1
Price per unit:	725USD per unit	Volume per carton:	0.0072m3
		Weight per carton:	1.5kg
		Incoterms:	EXW
Verification report:	WHO 15-032: FG 96 BUDENBERG	Verification laboratory:	CEMAFROID SAS
Current PQS status:	<i>pre-qualified ; 30 Jun 2015</i>		
		Valid until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/035
Description:	Remote Temperature Monitoring System
Manufacturer's ref:	Temperature@lert
Manufactured in:	China; People's Republic of
Company:	Schechter Tech LLC DBA Temperature@lert
Address:	108 Lincoln St., BA Boston, MA 02111 USA
Telephone:	+1--617--326--7300
Email:	sales@tempalert.com
Web address:	http://www.temperaturealert.com

Specifications

Product type:	Remote Temperature Monitoring System	Display medium:	LCD, computer, phone, tablet
Mode of operation:	Electronic	Weight	0.5kg
Minimum temperature:	-55°C	Main material:	ABS
Maximum temperature:	+55°C	Dimensions:	21.6 x 6.35 x 12.7

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	±0.5°C	Min logging interval:	5 min
Power source:	replaceable batteries	Alarm type:	Acoustic
Battery type:	Li Ion	User interface:	Web based or mobile phone
Battery shelf life:	3 to 5 years	Programmability:	Remotely programmable
Activated life:	60 mths	IP rating:	IP54
Memory capacity:	4000		

Comments:	<p>Temperature@lert's Remote Temperature Monitoring System (RTMS) provides an easily to deploy solution to remotely and reliably monitor the storage of vaccines and other temperature sensitive products. The system is configurable to your specific needs. The system uses the local mobile phone network to document temperature readings and generate alerts if temperature exceeds your defined thresholds. Actionable alerts include local audible and visual alerts on wireless sensors as well as remote alerts sent by email, SMS, and phone calls. The system is remotely accessible and configurable from any internet connected mobile device or computer. A powerful compliance and reporting tool enables the tracking of incidents and corrective actions, as well as automated reports for compliance and quality control. Our patented product temperature simulator enables you to track actual product temperature in addition to ambient temperature. Each System Includes: 1 wired sensor alerts by email and text/SMS message, full use of our Sensor Cloud dashboard for remote monitoring, store level reporting and corrective action logging, back up battery, LCD display, audible alerts, power cable, and 24-hour technical support. Up to 4 wired sensors and 25 wireless sensors may be added for an extra fee. NIST/ISO calibrated sensors are available for an extra fee. Customer supplies local SIM cards.</p>		
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Minimum order:	1	Year base price:	2015
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	1
Price per unit:	187USD per year on a 3 year agreement basis	Volume per carton:	0.003m3
		Weight per carton:	1.6kg
		Incoterms:	EXW
Verification report:	Verification laboratory:		
Current PQS status:	<i>pre-qualified ; 03 Jul 2015</i>		Valid until: <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/036
Description:	Remote Temperature Monitoring Device
Manufacturer's ref:	Ice3-BC140
Manufactured in:	South Africa
Company:	Beyond Wireless Technology (Pty) Ltd
Address:	21 Cradock avenue Rosebank Johannesburg South Africa
Telephone:	+27 112432960/1
Email:	sales@beyondwireless.co.za ; dion@beyondwireless.co.za
Web address:	http://www.beyondwireless.co.za ; http://www.coldcloud.co.za

Specifications

Product type:	Remote Temperature Monitoring System	Display medium:	Onboard LCD and Online (via internet browser)
Mode of operation:	Electronic	Weight	0.5 kg
Minimum temperature:	-50°C	Main material:	PS
Maximum temperature:	105°C	Dimensions:	13.5 x 9.5 x 5.0 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	0.5°C	Min logging interval:	60 seconds
Power source:	Mains + backup battery	Alarm type:	Acoustic
Battery type:	Lithium C cells	User interface:	
Battery shelf life:	10	Programmability:	User programmed
Activated life:	up to 10 yrs	IP rating:	IP54
Memory capacity:	23200 (unlimited online)		

Comments:

The ICE3 Remote Temperature Monitoring Device (RTMD) is used to provide automatic remote temperature logging real time monitoring and alarming for cold chain storage facilities and assets such as warehouses fridges freezers, walk-in cold rooms and vehicles. The device is capable of monitoring up to 5 temperature inputs and relative humidity. The device can also be configured to monitor mains power and or door position. It automatically logs temperature data which is then wirelessly transmitted via the local cellular network to the ColdCloud™ portal where the user is able to view and download historic and real time cold chain data via a secure username and password protected website from any internet enabled device. Alarms thresholds and alarm recipients are configured remotely via the ColdCloud™ portal and in the event of a temperature excursion being detected the system can automatically send the alarm to multiple recipients via both SMS and email. Detailed excursions reports and real time dashboards are accessible via the ColdCloud™ portal showing all alarms at a national regional site and asset level displaying the date and time of the alarms the duration and the alarm recipients.

Minimum order:	1	Year base price:	2015
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	1
Price per unit:	\$300 per unit	Volume per carton:	0.0015
		Weight per carton:	0.6
		Incoterms:	FCA
Verification report:		Verification laboratory:	
Current PQS status:	pre-qualified ; 11 Nov 2015	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/037
Description:	Remote Temperature Monitoring Device
Manufacturer's ref:	Ice3-Extra-BC440
Manufactured in:	South Africa
Company:	Beyond Wireless Technology (Pty) Ltd
Address:	21 Cradock avenue Rosebank Johannesburg South Africa
Telephone:	+27 112432960/1
Email:	sales@beyondwireless.co.za ; dion@beyondwireless.co.za
Web address:	http://www.beyondwireless.co.za ; http://www.coldcloud.co.za

Specifications

Product type:	Remote Temperature Monitoring System	Display medium:	Onbaord LCD and online
Mode of operation:	Electronic	Weight	1.5
Minimum temperature:	-10	Main material:	PS
Maximum temperature:	55	Dimensions:	23.0 x 8.0 x 26.0 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	0.5°C	Min logging interval:	60 seconds
Power source:	Mains + backup battery	Alarm type:	Acoustic
Battery type:	Panasonic 18650B	User interface:	Internet browser
Battery shelf life:		Programmability:	User programmed
Activated life:	72 hrs autonomy or 1000 cycles	IP rating:	IP54
Memory capacity:	50,000		

Comments:	<p>The Ice3 Remote temperature Monitoring Device (RTMD) is used to provide automatic remote logging, real-time monitoring and alarming for cold chain storage facilities and assets such as warehouses, fridges, freezers, walk-in cold rooms and vehicles.</p> <p>The device is capable of monitoring up-to 5 Temperature inputs and relative humidity. The device can also be configured to monitor mains power and/or door position.</p> <p>It Automatically logs temperature data which is then wirelessly transmitted via the local cellular network to the ColdCloud portal where the user is able to view and download historic and real-time cold chain data via a secure username and password protected website from any internet enabled device.</p> <p>Alarms thresholds and alarm recipients are configured remotely via the ColdCloud portal and in the event of a temperature excursion being detected, the system can automatically send the alarm to multiple recipients via both SMS and Email.</p>
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Minimum order:	1	Year base price:	2015
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	1
Price per unit:	\$580	Volume per carton:	0.011
	NTC temeprature probes \$39	Weight per carton:	1.5
	Annual fee \$480 per year	Incoterms:	FCA

Verification report:		Verification laboratory:	
Current PQS status:	<i>pre-qualified ; 11 Nov 2015</i>	Valid until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/038
Description:	Irreversible freeze indicator
Manufacturer's ref:	TICT-iS0°Tag
Manufactured in:	China; People's Republic of
Company:	LogTag Records Limited
Address:	PO Box 362-95, Northcote, Auckland, New Zealand

Telephone: +64 9 444 5881
Email: sales@logtagrecords.com
Web address: www.logtagrecords.com

Specifications

Product type:	Irreversible freeze indicator	Display medium:	Custom LCD display
Mode of operation:	Electronic	Weight	0.019Kg
Minimum temperature:	-25°C	Main material:	Polycarbonate
Maximum temperature:	+60°C	Dimensions:	7.15 x 3.3 x 0.86 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	+/- 0.5°C	Min logging interval:	5 mins
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	3V Lithium Li-Mg coin cell	User interface:	LCD screen
Battery shelf life:	3 years	Programmability:	Factory programmed
Activated life:	3 years	IP rating:	64
Memory capacity:	1096 MIN/MAX events, 540 real time measurements		

Comments:

The LogTag® TICT iS0°Tag® is a single-use, electronic freeze indicator for monitoring temperature as well as recording statistics during the transportation and storage of chilled products, such as vaccines, food or specialty chemical products, designed to meet WHO PQS performance specification E06/IN03.1 for irreversible freeze indicators.

The product is made from durable polycarbonate plastic and features an LCD display and a START/MARK button.

The LogTag TICT iS0°Tag® can monitor and record statistics against a -0.5°C temperature limit for up to 3 years, showing OK if environmental conditions remain at or above this limit. If, however, temperatures go below -0.5°C for more than 60 minutes continuously, the LCD shows a REJECT symbol, indicating the goods require further checking. The indicator stops and cannot be reset, once an alarm has been generated.

Minimum order:	50	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	200
Price per unit:	50-999 units: 6.5 \$US more than 1000 units: POA	Volume per carton:	0.017 m3
		Weight per carton:	4.5kg
		Incoterms:	EXW
Verification report:	7191129301-EEC16/NCH	Verification laboratory:	TUV SUD PSB Pte Ltd
Current PQS status:	pre-qualified ; 25 Apr 2016	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E006: Temperature monitoring devices

PQS code:	E006/039
Description:	Remote Temperature Monitoring Device
Manufacturer's ref:	ColdTrace 5
Manufactured in:	India
Company:	Nexleaf Analytics
Address:	2356 Pelham Avenue Los Angeles CA 90064 USA
Telephone:	+12139156729
Email:	info@nexleaf.org
Web address:	www.nexleaf.org

Specifications

Product type:	Remote Temperature Monitoring System	Display medium:	LCD, Computer, Phone, Tablet
Mode of operation:	Electronic	Weight	0.25
Minimum temperature:	-30°C	Main material:	Polycarbonate and ABS
Maximum temperature:	+55°C	Dimensions:	140 mm x 150 mm x 30 mm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	0.5°C	Min logging interval:	1 minute
Power source:	Rechargeable and Replaceable battery	Alarm type:	Acoustic
Battery type:	Li-ion	User interface:	Web Based
Battery shelf life:	2	Programmability:	Remotely programmable
Activated life:		IP rating:	
Memory capacity:	5 years		

Comments:

ColdTrace is a wireless temperature monitoring system for cold chain equipment (CCE). ColdTrace transmits data and provides real-time temperature alerts through audio alarm, SMS (text message), and email. Its technical features include dual SIM capacity, long battery life, external antenna and data upload through GPRS and SMS. Dashboard features include equipment performance and power availability summary reports on any device. Alerts for each sensor can be configured remotely, allowing one ColdTrace unit to monitor up to 5 CCE per site. The unit price includes (i) 2 sensor cables, (ii) full access to the dashboard, (iii) power adapter, (iv) mounting hardware, and (v) training guides. Multiple users can access the dashboard without any software installation. Warranty is only provided on the device and not the accessories. Customer supplies SIM cards and SMS gateway services. Other components and services are available for an additional fee, including additional sensor cables (CT5 has 5 ports), solar installation kit, data analytics tools, language customization, and data integration with existing systems (e.g. LMIS). Price per unit cost can be paid all at once rather than yearly payments.

Minimum order:	1	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	1
Price per unit:	US\$ 77 per year on a 3 yearly agreement	Volume per carton:	0.002 m3
		Weight per carton:	0.75 kg
		Incoterms:	EXW
Verification report:		Verification laboratory:	
Current PQS status:	pre-qualified ; 20 Jul 2016	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code: E006/040

Description: 30-day electronic temperature logger

Manufacturer's ref: Fridge-tag 2 E

Manufactured in:

Company: Berlinger & Co. AG

Address: Mitteldorfstrasse 2,
CH-9608 Ganterwil,
Switzerland

Telephone: +41 (71) 982 88 11

Email: info@berlinger.com

Web address: <http://www.berlinger.com>

Specifications

Product type:	30-day electronic refrigerator temperature logger	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.112 kg
Minimum temperature:	-20°C	Main material:	Non-corrodible plastic (ABS)
Maximum temperature:	+55°C	Dimensions:	128 x 75 x 19 mm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	±0.5°C	Min logging interval:	1 min
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Lithium non-replaceable	User interface:	LCD
Battery shelf life:	60 months from the manufacturing date	Programmability:	Factory programmed
Activated life:	60 months from the manufacturing date	IP rating:	64
Memory capacity:			

Comments:	<p>Function: An irreversible temperature indicator for refrigerators that shows if a product, such as vaccine, has been exposed to temperatures beyond assigned alarm settings defined above. As long as the temperature is within the allowed range, the OK sign is shown in the display. If the indicator is exposed to an out-of-range temperature on the ALARM sign appears on the display. The device shows the actual temperature in degrees Celsius or Fahrenheit, all alarm violations over the previous 30 days (on a rolling basis), the daily minimum and maximum temperature of the last 30 days and the time duration of any violation. Useful life is 5 years approx. Furthermore, the Fridge-tag2 E has a USB interface and can be connected to every PC, Laptop or Mac. without any installation software, the Fridge-Tag 2 E will generate a PDF document with a 60 days report which includes all relevant information per day such as Min/Max and average temperatures, time out of range, alarm history etc.</p> <p>Use: This electronic temperature indicator is used to monitor the correct storage temperature of vaccines and other perishable goods. The Fridge-Tag 2 E can operate with either the built in sensor or with an external sensor with or without a glycol filled bottle (external sensor price on request).</p>
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Minimum order:	20	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	50
Price per unit:	20 - 49 units: 73 USD ; 50 - 99 units: 63 USD 100 - 999 units: 51 USD 1000 - 9999 units: 39 USD; 999+ units: 35 USD	Volume per carton:	0.001423 m3
		Weight per carton:	8.02 Kg
		Incoterms:	EXW
Verification report:		Verification laboratory:	
Current PQS status:	pre-qualified ; 30 Oct 2016	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



E006: Temperature monitoring devices

PQS code:	E006/041
Description:	Remote Temperature Monitoring Device
Manufacturer's ref:	Fridge-tag 3 GSM
Manufactured in:	Switzerland
Company:	Berlinger & Co. AG
Address:	Mitteldorfstrasse 2, CH-9608 Ganterschwil, Switzerland
Telephone:	+41 (71) 982 88 11
Email:	info@berlinger.com
Web address:	http://www.berlinger.com

Specifications

Product type:	Remote Temperature Monitoring System	Display medium:	LCD
Mode of operation:	Electronic	Weight	0.17 kg
Minimum temperature:	-30°C	Main material:	Non-corrodible plastic (ABS)
Maximum temperature:	+55°C	Dimensions:	13.6 x 9.8 x 2.1 cm
MECHANICAL AND ELECTRONIC DEVICES ONLY			
Accuracy:	± 0.5°C	Min logging interval:	1 min
Power source:	Rechargeable and Replaceable battery	Alarm type:	Visual
Battery type:	Lithium Polymer Li-ion battery	User interface:	LCD
Battery shelf life:	3 years	Programmability:	Factory programmed/online configurable
Activated life:		IP rating:	IP50
Memory capacity:	60 days on device and 5 years on RTM online platform		
Comments:	<p>Fridge-tag 3 ® GSM is a wireless temperature monitoring system for cold chain equipment (CCE). Fridge-tag 3 ® GSM transmits data and provides real-time temperature alerts through audio alarms and SMS (text messages); Alarm are also visible on the LCD display of the device. Its technical features include sim card slot for local or international sim card use, long battery life and operation, integrated antenna, external digital sensor and temperature data and power availability information upload through GPRS and SMS. Fridge-tag 3® GSM can be used standalone or/and it can be integrated with Remote Temperature Monitoring (RTM) system (such as Logistimo) or other LMIS online platforms through its open API. The device can be configured remotely through either SMS or online platforms. The unit price includes (i) device, (ii) external digital sensor, (iii) power adapter and cable, (iv) mounting aid and (v) training guides. Warranty is only provided for the device and not for the accessories. For an additional fee an international sim card, with worldwide coverage can be provided, which enables automated selection of the strongest local network provider, optimal transmission costs and support. For an additional fee (of USD 24 / device / year), full access to Logistimo RTM online platform can be provided which includes: (a) real-time, interactive dashboards for monitoring cold-chain equipment performance and status (from National level down to facility level), (b) out-of-the-box analytics for gaining insights into cold-chain performance and strategic decision making, (c) alerts and notifications over SMS and/or email (SMS gateway charges are separate), and (d) remote device management, including remote configuration of devices and device monitoring.</p>		
Minimum order:	500	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	1
Price per unit:	500 - 5000 units: 199.00 USD	Volume per carton:	0.001584 m3
	5000 - 19,999 units: 149.00 USD	Weight per carton:	0.25 kg
	20,000+ units: price on request	Incoterms:	EXW
Verification report:	VA16-01074	Verification laboratory:	
Current PQS status:	<i>pre-qualified ; 30 Oct 2016</i>		
		Valid until:	<i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.			



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/042
Description:	30-day electronic temperature logger
Manufacturer's ref:	HETL-01
Manufactured in:	China; People's Republic of
Company:	Haier Medical and Laboratory Products Co., Ltd
Address:	Room 703D, Brand Building, Haier Industry Park, No. 1 Haier Road, 266101 Qingdao, China; People's Republic of

Telephone: +86-532-88937169

Email: wanggs@haier.com

Web address: <http://www.haiermedical.com>

Specifications

Product type:	30-day electronic refrigerator temperature logger	Display medium:	LCD
Mode of operation:		Weight	0.14 kg
Minimum temperature:	-20	Main material:	ABS
Maximum temperature:	+50	Dimensions:	13.1 x 2.4

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	± 0.5°C	Min logging interval:	6 min
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	Non-rechargeable lithium battery	User interface:	device itself
Battery shelf life:	3 years	Programmability:	Factory programmed
Activated life:	2 years	IP rating:	IP65
Memory capacity:	8192 data points		

Comments: 30-day electronic refrigerator temperature logger, integrated sensor devices, reusable. It is used to monitor and log the vaccine and pharmacy storage environment, applied in vaccine refrigerators and cold rooms. This device can log the daily temperature data, and alarm indications displayed in the LCD display when the temperature exceeds. Data with 30 days can be viewed and downloaded by USB port to PC, and generate temperature charts

Minimum order:	5	Year base price:	2016
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	5
Price per unit:	1-100 units: USD 23.00 101-200 units: USD 22.00; 201-500 units: USD 21.00 >501 units: USD 20.00	Volume per carton:	0.001m3
		Weight per carton:	0.14 kg
		Incoterms:	FCA
Verification report:	WB-16-243	Verification laboratory:	CHEARI
Current PQS status:	pre-qualified ; 14 Jul 2016	Valid until:	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.



PERFORMANCE QUALITY SAFETY



E006: Temperature monitoring devices

PQS code:	E006/043
Description:	User programmable temperature data logger
Manufacturer's ref:	Weblogger II
Manufactured in:	Sweden
Company:	Temperature Sensitive Solutions AB
Address:	Temperature Sensitive Solutions AB, Kammakargatan 9 A, 111 40 Stockholm, Sweden
Telephone:	+4686300606
Email:	kjell.runngren@tss.se
Web address:	http://www.tss.se

Specifications

Product type:	User-programmable temperature data logger	Display medium:	
Mode of operation:	Electronic	Weight	0.036 Kg
Minimum temperature:	-30°C	Main material:	ABS
Maximum temperature:	70°C	Dimensions:	9.0 x 4.3 x 1.15 cm

MECHANICAL AND ELECTRONIC DEVICES ONLY

Accuracy:	+/- 0.5°C	Min logging interval:	1 min
Power source:	Non-replaceable battery	Alarm type:	Visual
Battery type:	CR Lithium	User interface:	USB for computer
Battery shelf life:	1 year	Programmability:	User programmed
Activated life:	12 months	IP rating:	IP 65
Memory capacity:	40 000 data points		

Comments:	The WebLogger II is a RoHS, CE and IATA compliant electronic temperature data logger. The logger can be individually configured and programmed or ordered preconfigured. It offers unique management of mission data, e.g. Shipping #, Origin, Destination, Carrier, and Data-Logger Location in the CCIS cloud. When the logger is plugged into a computer USB port, an HTM file is created containing the data. Clicking the file will display the result on a web dashboard and secure the mission data in the CCIS private secure cloud.
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Minimum order:	100	Year base price:	2017
Quality standard:	- ISO 9001:2008 -	Pieces per carton:	100
Price per unit:	100-250: €39	Volume per carton:	0.0104 m3
	250+: €38	Weight per carton:	4.0 kg
	1000+: on request to manufacturer	Incoterms:	FCA

Verification report:		Verification laboratory:	
Current PQS status:	<i>pre-qualified ; 03 Mar 2017</i>	Valid until:	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased.

E007

Cold chain accessories

This section covers miscellaneous cold chain accessories. A PQS specification for small voltage stabilizers has now been published and manufacturers have been invited to submit products for re-qualification. Meanwhile, the PIS qualified equipment can still be obtained from UNICEF Supply Division.

E007.1 Voltage stabilizers for refrigerators and freezers

Wherever voltage fluctuations exceed $\pm 15\%$ of the rated voltage at the supply point WHO recommends that refrigerators and freezers should be connected to the mains supply via a voltage stabilizer. Any associated electronic temperature monitoring equipment and computers should, ideally, be connected to a separate voltage-regulated circuit; this type of equipment is particularly sensitive to voltage fluctuations and to lightning-induced power surges.

Tap-changing voltage stabilizers are the most suitable type of voltage stabilizer for refrigeration equipment. There are a number of different models on the market; some are more reliable than others. A common type, supplied by many manufacturers, uses electronic tap-changing technology. This type is prone to failure due to switching stresses. The most reliable devices use relays. As an example, one typical widely used unit can control output voltages between -8% to $+9\%$ when the input voltage varies between -34% to $+26\%$.

The simplest arrangement is to supply one single-outlet unit with each refrigeration appliance. NEVER use an adaptor to connect more than one appliance to a regulator's electrical outlet and never use an adaptor to connect more than one regulator to a wall socket. Under PIS, separate models were available for compression and absorption refrigerators and freezers. Under PQS all models will be pre-qualified for both types of equipment – when using the older devices ALWAYS choose the right type and make sure that it is connected to the correct appliance.

E007.2 Refrigerator spare parts and kits

Products in this category at present remain unchanged from the PIS 2000 catalogue for the time being.

Currently there are no data sheets for this section

E008

Single-use injection devices

The products listed in this section include single-use syringes and needle-free injectors used to administer vaccines. Reusable syringes are no longer listed and are no longer recommended by WHO.

Correct use of injections for immunization

An injection should only be given if it is necessary. Every injection given must be safe.

- An injection for immunization is necessary (with the exception of oral vaccines).
- An immunization injection is safe when the vaccine is injected using the appropriate equipment and according to the recommended procedures¹ for injection and disposal.

The following equipment may, in principle, be used to administer injectable vaccines:

- Auto-disable syringes to ISO 7886-3:2005.
- Single-use auto-disable needle-free syringe injectors.

E008.1 Auto-disable (AD) syringes with fixed needles

PQS pre-qualified syringes must now comply with ISO 7886-3:2005 - *Sterile hypodermic syringes for single use - Part 3: Auto-disable syringes for fixed-dose immunization*.

The auto-disable syringe is the preferred type of disposable equipment for the administration of vaccines in both routine and mass immunization programmes. The auto-disable syringe carries the lowest risk of person-to-person transmission of blood borne pathogens because it cannot be reused².

E008.2 Single-use auto-disable needle-free syringe injectors

It remains current WHO policy that this type of injector can be used only if laboratory tests show that it does not carry a risk of contamination.

¹ [WHO/EPI/TRAM/98.01-11 Rev 1](#). *Immunization in practice series*.

² [WHO/V&B/99.25](#). *Safety of injections: WHO-UNICEF-UNFPA joint statement on the use of auto-disable syringes in immunization services*.

WHO has published a PQS specification and verification protocol for these devices³ and recommends that only injectors which meet the requirements set out in these documents should be used. Currently there are no pre-qualified models, but when such equipment becomes available it will be included in the PQS data sheets.

E008.3 Standard disposable syringes

Standard disposable syringes and needles should not be used for immunization purposes because there is no guarantee that they will be destroyed after a single use. UNICEF will not supply this type of syringe for immunization purposes.

WARNING: There is clear evidence that the reuse of disposable syringes is widespread globally. WHO warns governments and donor agencies that the reuse of standard disposable syringes and needles places the general public at high risk of disease and death.

E008.4 Disposal of injection equipment

Additional equipment is necessary to ensure the safety of the contaminated waste stream - see section E010:

- Safety boxes for the collection of used syringes, needles and sharps.
- Needle disableers and needle safety boxes.
- Incinerators and autoclaves for final disposal of used injection equipment.

Injection equipment is only safe if users strictly follow the procedures specified for its use, and this includes safe disposal.⁴

E008 data sheets follow

³ WHO/PQS/E08/JI01.1: *Specification for single-use auto-disable needle-free syringe injectors.*

[WHO/PQS/E08/JI01-VP.1](#). *Verification protocol for single-use auto-disable needle-free syringe injectors.*

⁴ [WHO/BCT/03.12](#). *Guiding principles to ensure injection device security..*



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/004
Description: AD syringe 0.5 ml
Manufacturer's reference: MEDECO® INJECT AD 0.5 ml
Manufactured in: United Arab Emirates
Company: Abu Dhabi Medical Devices Co. L.L.C
Address: P.O.Box 30485, Abu Dhabi
United Arab Emirates

Telephone: +971-2-6199100
Email: info@admd.ae
Web address: <http://www.admd.ae>

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark 0434
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	1300
AD mechanism:	valve in the syringe hub	Volume per carton (m3):	0.055 m3
AD location:	Start of injection	Weight per carton (kg):	5.7 kg
Number of components:	3 pieces	Minimum order:	1300
Other needle options:	Yes	Incoterms:	EXW
Primary packaging:	Blister pack	Prices per unit:	100 000 units and more: 0.054 US\$ per piece
Year base price:	2016		

Comments:

Current PQS status: pre-qualified ; 25 Sep 2005 **Valid until :** May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E008: Auto-disable syringe for fixed dose immunization

PQS code:	E008/007
Description:	AD syringe 0.5ml
Manufacturer's reference:	Kojak Seling 0.5ml
Manufactured in:	India
Company:	Hindustan Syringes & Medical Devices Ltd.
Address:	174, Sector - 25, Ballabgarh - 121 004 (Haryana) India
Telephone:	+91 129-4061151/58
Email:	hmduk@hmdhealthcare.com
Web address:	www.hmdhealthcare.com

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark 0473
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	2000
AD mechanism:	Locked / broken plunger	Volume per carton (m3):	0.09 m3
AD location:	Upon completion of injection	Weight per carton (kg):	14.5 kg
Number of components:	3 pieces	Minimum order:	20,000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister or ribbon pack	Prices per unit:	Over 1 million: 0.06 USD; over 5 millions: 0.0575 USD
Year base price:	2011		Over 10 millions: 0.055 USD Over 50 millions: 0.0525 USD

Comments: Option: Two types of packs with 100 units or 200 units
Other needle sizes available on request

Current PQS status: pre-qualified ; 22 Dec 2004

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/013
Description: AD syringe 0.5ml
Manufacturer's reference: AD SoloShot TM IX 0.5ml
Manufactured in: Spain
Company: Becton Dickinson
Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone: +1 201-847-5149
Email: Amardeep_Singh_Chahal@bd.com
Web address: <http://www.bd.com>

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	2400
AD mechanism:	Clip locking plunger at start	Volume per carton (m3):	0.1029 m3
AD location:	Start of injection	Weight per carton (kg):	11.49 kg
Number of components:	2 pieces	Minimum order:	2400
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2005		

Comments:

Current PQS status: pre-qualified ; 25 Jun 2005

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/019
Description: AD syringe 0.5ml
Manufacturer's reference: K1 OneJect AD 0.5ml
Manufactured in: Indonesia
Company: PT Oneject Indonesia
Address: Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE 0044
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	1600
AD mechanism:	Locked / broken plunger	Volume per carton (m3):	0.06 m3
AD location:	Upon completion of injection	Weight per carton (kg):	7.7 kg
Number of components:	3 pieces	Minimum order:	16,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2005		

Comments:

Current PQS status: pre-qualified ; 12 Oct 2005

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/020
Description: AD syringe 0.5ml
Manufacturer's reference: Yushou® AD syringe 0.5ml
Manufactured in: China; People's Republic of
Company: Wuxi Yushou Medical Appliances Co., Ltd
Address: No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Telephone: +86 (510)3777555
Email: mike@chinasyringe.com
Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.5ml	Quality standard:	SO 13485
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	3000
AD mechanism:	Clip locking plunger at start	Volume per carton (m3):	0.088 m3
AD location:	Start of injection	Weight per carton (kg):	11 kg
Number of components:	3 pieces	Minimum order:	3000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Per unit: 0.05 US\$
Year base price:	2005		

Comments:

Current PQS status: pre-qualified ; 22 Sep 2005

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E008: Auto-disable syringe for fixed dose immunization

PQS code:	E008/025
Description:	Retractable AD syringe 0.5ml
Manufacturer's reference:	Vanishpoint® Retractable AD syringe 0.5ml
Manufactured in:	China; People's Republic of
Company:	Retractable Technologies, Inc.
Address:	511 Lobo Lane, Little Elm, TX 75068
Telephone:	+1 972 294 1010
Email:	rticlinical@vanishpoint.com
Web address:	http://www.vanishpoint.com/

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	800
AD mechanism:	Retraction of needle into barrel by spring	Volume per carton (m3):	0.0432 m3
AD location:	Upon completion of injection	Weight per carton (kg):	4.5 kg
Number of components:	3 pieces	Minimum order:	800
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	<i>On request</i>
Year base price:	2005		

Comments: The retraction of the needle is considered as a reuse prevention feature (RUP) and a sharp injury Protection (SIP)

Current PQS status: *pre-qualified ; 15 Jun 2005*

Valid until : *May 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/026
Description: AD syringe 0.5ml
Manufacturer's reference: AD syringe 0.5ml K1
Manufactured in: Vietnam
Company: Mediplast Medical Plastic Company
Address: 89 Luong Dinh Cua Rd., Phuong mai Vietnam
Telephone: +84 4 5760770
Email: mediplast@fpt.vn
Web address:

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	2400
AD mechanism:	locked/broken plunger	Volume per carton (m3):	0.107 m3
AD location:	Upon completion of injection	Weight per carton (kg):	9.8 kg
Number of components:	3 pieces	Minimum order:	2400
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2016		

Comments:

Current PQS status: pre-qualified ; 14 Jul 2006

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/030
Description: AD syringe 0.05 ml
Manufacturer's reference: K1 Oneject 0.05 ml
Manufactured in: Indonesia
Company: PT Oneject Indonesia
Address: Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Telephone: +62 21 879 17 422
Email: marketing@oneject.co.id
Web address: www.oneject.co.id

Specifications

Graduations:	0.05ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE 0044
Fixed needle size:	26G x 3/8" (0.45 x 10 mm)	Pieces per carton:	1600
AD mechanism:	Locked / broken plunger	Volume per carton (m3):	0.06 m3
AD location:	Upon completion of injection	Weight per carton (kg):	6.3 kg
Number of components:	3 pieces	Minimum order:	16,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2007		

Comments:

Current PQS status: pre-qualified ; 21 May 2007

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/032
Description: AD syringe 0.1ml
Manufacturer's reference: YUSHOU® AD syringe 0.1ml
Manufactured in: China; People's Republic of
Company: Wuxi Yushou Medical Appliances Co., Ltd
Address: No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Telephone: +86 (510)3777555
Email: mike@chinasyringe.com
Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.1ml	Quality standard:	SO 13485
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3000
AD mechanism:	locking clip, locked trapped piston	Volume per carton (m3):	0.088 m3
AD location:	Start of injection	Weight per carton (kg):	11 kg
Number of components:	3 pieces	Minimum order:	3000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2008		

Comments:

Current PQS status: pre-qualified ; 05 Jan 2009

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/033
Description: AD syringe 0.05ml
Manufacturer's reference: Yushou® AD syringe 0.05ml
Manufactured in: China; People's Republic of
Company: Wuxi Yushou Medical Appliances Co., Ltd
Address: No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Telephone: +86 (510)3777555

Email: mike@chinasyringe.com

Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.05ml	Quality standard:	SO 13485
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3000
AD mechanism:	locking clip, locked trapped piston	Volume per carton (m3):	0.088 m3
AD location:	Start of injection	Weight per carton (kg):	11 kg
Number of components:	3 pieces	Minimum order:	3000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2008		

Comments:

Current PQS status: pre-qualified ; 05 Jan 2009

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code:	E008/034
Description:	AD syringe 0.5 ml
Manufacturer's reference:	AD syringe 0.5 ml SKIFA
Manufactured in:	Indonesia
Company:	Mitra Rajawali Banjaran, PT
Address:	JL. Raya Banjaran KM16 Bandung, Jawa Barat Indonesia
Telephone:	+62 22 594 0151
Email:	yantomaunk@yahoo.co.id ; iwans9948@gmail.com ; erna_saptawati@yahoo.com
Web address:	http://www.mrb.co.id

Specifications

Graduations:	0.5ml	Quality standard:	SO 13485
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	2000
AD mechanism:	locked middle injection -broken plunger	Volume per carton (m3):	0.071 m3
AD location:	Middle of injection	Weight per carton (kg):	9.64 kg
Number of components:	3 pieces	Minimum order:	10 000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Plastic ribbon	Prices per unit:	On request
Year base price:	2008		

Comments:

Current PQS status: *pre-qualified ; 14 Jan 2009*

Valid until : *May 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/035
Description: AD syringe 0.5ml
Manufacturer's reference: Auto-disable syringe 0.5ml BD SoloShot™ Mini
Manufactured in: Spain
Company: Becton Dickinson
Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone: +1 201-847-5149
Email: Amardeep_Singh_Chahal@bd.com
Web address: <http://www.bd.com>

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	3300
AD mechanism:	locking clip; locked trapped piston	Volume per carton (m3):	0.102 m3
AD location:	Start of injection	Weight per carton (kg):	10.45 /10.20 kg
Number of components:	2 pieces	Minimum order:	3300 / 3600
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2009		

Comments: Product is available in 100 pc and 200 pc per shelf pack, which results respectively in 3300 pcs and 3600 pcs per carton

Current PQS status: pre-qualified ; 08 Apr 2009

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/036
Description: AD syringe 0.1ml
Manufacturer's reference: AD syringe 0.1ml BD SoloShot™ Mini
Manufactured in: Spain
Company: Becton Dickinson
Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone: +1 201-847-5149
Email: Amardeep_Singh_Chahal@bd.com
Web address: <http://www.bd.com>

Specifications

Graduations:	0.1ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3300
AD mechanism:	locking clip; locked trapped piston	Volume per carton (m3):	0.102 m3
AD location:	Start of injection	Weight per carton (kg):	10.45 kg / 10.2 kg
Number of components:	2 pieces	Minimum order:	3300 / 3600
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2009		

Comments: Product is available in 100 pc and 200 pc per shelf pack, which results respectively in 3300 pcs and 3600 pcs per carton

Current PQS status: pre-qualified ; 08 Apr 2009

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/037
Description: AD syringe 0.05ml
Manufacturer's reference: AD syringe 0.05ml BD SoloShot™ Mini
Manufactured in: Spain
Company: Becton Dickinson
Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone: +1 201-847-5149
Email: Amardeep_Singh_Chahal@bd.com
Web address: <http://www.bd.com>

Specifications

Graduations:	0.05ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3300
AD mechanism:	locking clip; locked trapped piston	Volume per carton (m3):	0.102 m3
AD location:	Start of injection	Weight per carton (kg):	10.45 kg / 10.2 kg
Number of components:	2 pieces	Minimum order:	3300 / 3600
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2009		

Comments: Product is available in 100 pc and 200 pc per shelf pack, which results respectively in 3300 pcs and 3600 pcs per carton

Current PQS status: pre-qualified ; 08 Apr 2009

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E008: Auto-disable syringe for fixed dose immunization

PQS code:	E008/039
Description:	AD syringe 0.5 ml
Manufacturer's reference:	KOJAK SELINGE 0.5ml
Manufactured in:	India
Company:	Hindustan Syringes & Medical Devices Ltd.
Address:	174, Sector - 25, Ballabgarh - 121 004 (Haryana) India
Telephone:	+91 129-4061151/58
Email:	hmduk@hmdhealthcare.com
Web address:	www.hmdhealthcare.com

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	2000
AD mechanism:	locked / broken plunger	Volume per carton (m3):	0.09 m3
AD location:	Start of injection	Weight per carton (kg):	14.5 kg
Number of components:	3 pieces	Minimum order:	20,000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister or ribbon pack	Prices per unit:	Over 1 million: 0.06 USD; Over 5 millions: 0.0575 USD
Year base price:	2011		Over 10 millions: 0.055 USD Over 50 millions: 0.0525 USD

Comments: Two types of packs with 100 units or 200 units
Other needle size available upon request

Current PQS status: *pre-qualified ; 15 Apr 2009*

Valid until : *May 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/040
Description: AD Syringe 0.5ml
Manufacturer's reference: AD Syringe 0.5ml
Manufactured in: Kenya
Company: Revital Healthcare Ltd.
Address: Pandia Street, Off Mawakilingo Road,
Station area, PO Box 80813
Code 80100
Mombasa
Telephone: +254 41 2228962
Email: info@revitalhealthcare.com
Web address: www.revitalhealthcare.com

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE 1023
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	4000
AD mechanism:	Plunger Disable	Volume per carton (m3):	
AD location:	Upon completion of injection	Weight per carton (kg):	6 kg
Number of components:	2 pieces	Minimum order:	860 000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	Per unit: 0.06 €
Year base price:	2008		

Comments: Shipper cartons of 8600 boxes of 100 pieces
Note: this syringe is to be used with caution by health care workers as per instructions of use.

Current PQS status: pre-qualified ; 08 Oct 2009

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/041
Description: AD syringe 0.5ml
Manufacturer's reference: AD syringe 0.5ml
Manufactured in: China; People's Republic of
Company: Anhui Tiankang Medical Technology Co., Ltd
Address: 228, Weiye Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Telephone: +86 550 7022258
Email: marshall988@163.net
Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	7680
AD mechanism:	Clip blocking plunger	Volume per carton (m3):	Container 28 m3
AD location:	Start of injection	Weight per carton (kg):	Container 3840 kg
Number of components:	3 pieces	Minimum order:	768 000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	Up to 768 000 units: 0.0405 €
Year base price:	2008		Up to 1 590 000 units: 0.0378 €

Comments: Cartons of 7680 boxes of 100 pieces

Current PQS status: pre-qualified ; 12 Nov 2009

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/043
Description: AD syringe 0.5ml
Manufacturer's reference: AD syringe 0.5ml
Manufactured in: China; People's Republic of
Company: Jiangxi Sanxin Medtec Co.,Ltd
Address: 999 Fushan Road, Xiaolan Economic Development Zone, Nanchang, Jiangxi, P.C. 330200 China; People's Republic of
Telephone: +86 791 85988111
Email: sanxin-med@vip.163.com
Web address: www.sanxin-med.com

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	25G x 3/4" (0.50 x 19 mm)	Pieces per carton:	3000
AD mechanism:	Plunger lock	Volume per carton (m3):	0.1 m3
AD location:	Upon completion of injection	Weight per carton (kg):	15 kg
Number of components:	3 pieces	Minimum order:	2000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	On request
Year base price:	2009		

Comments:

Current PQS status: pre-qualified ; 02 Sep 2010

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/045
Description: AD syringe 0.1ml
Manufacturer's reference: Kojak AD syringe 0.1ml
Manufactured in: India
Company: Hindustan Syringes & Medical Devices Ltd.
Address: 174, Sector - 25, Ballabgarh - 121 004 (Haryana) India

Telephone: +91 129-4061151/58
Email: hmduk@hmdhealthcare.com
Web address: www.hmdhealthcare.com

Specifications

Graduations:	0.1ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	26G x 3/8" (0.45 x 10 mm)	Pieces per carton:	2000
AD mechanism:	Locked / broken plunger	Volume per carton (m3):	0.071m3 or 0.069m3
AD location:	Upon completion of injection	Weight per carton (kg):	8.80kgs
Number of components:	3 pieces	Minimum order:	100,000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	On request to manufacturer
Year base price:	2011		

Comments: Two types of packs with 100 units or 200 units
Other needle sizes available on request

Current PQS status: pre-qualified ; 10 May 2011

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code:	E008/046
Description:	AD syringe 0.5ml
Manufacturer's reference:	PAHF AD syringe 0.5ml
Manufactured in:	Nigeria
Company:	Pan African Health Foundation
Address:	East-West road, Rumuosi Port Harcourt, Rivers State Nigeria
Telephone:	+234 8035954218 / 8060501316
Email:	awokoma@pahfadsyringe.org ; info@pahfadsyringe.org
Web address:	http://www.pahfadsyringe.org

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	1200
AD mechanism:	Locked / broken plunger	Volume per carton (m3):	0.077 m3
AD location:	Upon completion of injection	Weight per carton (kg):	8.6 kg
Number of components:	3 pieces	Minimum order:	1200 units
Other needle options:	Yes	Incoterms:	EXW
Primary packaging:	Blister pack	Prices per unit:	0.037 € per unit
Year base price:	2012		

Comments:

Current PQS status: *pre-qualified ; 19 Mar 2012* **Valid until :** *May 2017*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/048
Description: AD syringe 0.5ml
Manufacturer's reference: Apple K1 AD syringe
Manufactured in: Pakistan
Company: AMSON VACCINES & PHARMA (PVT) LTD.
Address: 115, Industrial Triangle, Kahuta road, Islamabad Pakistan
Telephone: +92 51 4492022
Email: naveed@amson.org.pk
Web address: www.amson.org.pk

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	24G x 1" (0.55 x 25 mm)	Pieces per carton:	1200
AD mechanism:	Locked / broken plunger	Volume per carton (m3):	0.07 m3
AD location:	Upon completion of injection	Weight per carton (kg):	8.62 kg
Number of components:	3 pieces	Minimum order:	100,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	On request to manufacturer
Year base price:	2012		

Comments:

Current PQS status: pre-qualified ; 02 Nov 2012

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/049
Description: AD syringe 0.1ml
Manufacturer's reference: Yi Xin 0.1ml
Manufactured in: China; People's Republic of
Company: Jiangxi Sanxin Medtec Co.,Ltd
Address: 999 Fushan Road, Xiaolan Economic Development Zone, Nanchang, Jiangxi, P.C. 330200 China; People's Republic of
Telephone: +86 791 85988111
Email: sanxin-med@vip.163.com
Web address: www.sanxin-med.com

Specifications

Graduations:	0.1ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	26G x 3/8" (0.45 x 10 mm)	Pieces per carton:	3000
AD mechanism:	Plunger lock	Volume per carton (m3):	0.104m3
AD location:	Upon completion of injection	Weight per carton (kg):	11 kg
Number of components:	3 pieces	Minimum order:	100,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2013		

Comments:

Current PQS status: pre-qualified ; 29 Jan 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/050

Description: single-use auto-disable needle-free jet injector

Manufacturer's reference: Pharmajet Stratis®

Manufactured in: United States

Company: PharmaJet, Inc.

Address: 400 Corporate Circle,
Suite N
Golden, Colorado 80401
USA

Telephone: +1 (0) (303) 526-4278 Ext. 4172

Email: michael.ryan@pharmajet.com

Web address: <http://www.pharmajet.com/>

Specifications

Reset station	Injector	Needle free syringe	Filling adapter
Reference manufacturer C501-20	Reference manufacturer: C501-10	Reference manufacturer: C501-34	Reference manufacturer: C501-43 & C501-46
Activation: manual	Administration: IM or SC	Nominal capacity and graduation: 0.5ml	Material of adaptor: Polycarbonate
Force applied:	Energy source: spring	Main materials of syringe: Polycarbonate	Compatibility only with the Stratis needle-free syringe
Life time cycles: 20,000 min	Main material: ABS, stainless steel	Prevented from reuse by: Plunger break before injection	Intended for one vial use for field-filling of syringes
Carrying case IP: 55	Inadvertent actuation prevention feature	Primary packaging: paper blister packs	Primary packaging: paper blister packs
Warranty 2 years	Warranty 2 years	Number of syringes per box: 100 units	Number of adapters per box: 75 units
The PharmaJet Stratis™ needle-free injection system is intended to deliver various medications and vaccines either intramuscularly or subcutaneously by means of narrow precise fluid stream, which penetrates body tissues.			
Quality system Standard	ISO 9001, ISO 13485,	Product standard:	ISO 7886-3; FDA 510(k); CE 556625

Comments:

Single-use auto-disable needle-free jet injector
Note: Jet Injectors (single-use auto-disable needle-free syringe injectors) as medical devices (Class II) are regulated by National Regulatory Authorities. A Jet injector prequalified by the WHO PQS programme to deliver medications and vaccines is to be used according to label to deliver ONLY those medications and vaccines that have been approved by the relevant Authorities.

Current PQS status: pre-qualified ; 31 Jan 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/051
Description: AD syringe 0.5ml
Manufacturer's reference: JMI AD syringe 0.5ml
Manufactured in: Bangladesh
Company: JMI Syringes & Medical Devices Ltd.
Address: 7/A Shantibag
Dhaka-1217
Bangladesh
Telephone: +88029333102
Email: cml@jmigroup-bd.com
Web address: <http://www.jmisyringe.com/>

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	2400
AD mechanism:	Plunger lock	Volume per carton (m3):	0.133 m3
AD location:	Upon completion of injection	Weight per carton (kg):	15.6 kg
Number of components:	3 pieces	Minimum order:	192,000
Other needle options:	No	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	<i>Upon request to manufacturer</i>
Year base price:	2013		

Comments:

Current PQS status: *pre-qualified ; 29 May 2013*

Valid until : *May 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/052
Description: AD syringe 0.05ml
Manufacturer's reference: OnejectII 0.05ml AD syringe
Manufactured in: Indonesia
Company: PT Oneject Indonesia
Address: Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.05ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	1600
AD mechanism:	Plunger lock	Volume per carton (m3):	0.051m3
AD location:	Upon completion of injection	Weight per carton (kg):	8.23kg
Number of components:	3 pieces	Minimum order:	16,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2013		

Comments:

Current PQS status: pre-qualified ; 05 Jun 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/053
Description: AD syringe 0.5ml
Manufacturer's reference: OnejectII 0.5 ml AD syringe
Manufactured in: Indonesia
Company: PT Oneject Indonesia
Address: Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	24G x 1" (0.55 x 25 mm)	Pieces per carton:	1600
AD mechanism:	Plunger lock	Volume per carton (m3):	0.052m3
AD location:	Upon completion of injection	Weight per carton (kg):	7.66kg
Number of components:	3 pieces	Minimum order:	16,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2013		

Comments:

Current PQS status: pre-qualified ; 05 Jun 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E008: Auto-disable syringe for fixed dose immunization

PQS code:	E008/055
Description:	Retractable AD syringe 0.25ml
Manufacturer's reference:	Safeguard retractable safety syringe 0.25ml
Manufactured in:	Hungary
Company:	Safeguard Medical (Hungary) Kft
Address:	Safeguard Medical (Hungary) Kft Farkaslyuk Joszerencset terv 15 3608 Hungary
Telephone:	+36 48 470758
Email:	filippif@safeguardmedical.hu
Web address:	www.safeguardmedical.com

Specifications

Graduations:	0.25ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	1000
AD mechanism:	Needle retraction	Volume per carton (m3):	0.056 m3
AD location:	Upon completion of injection	Weight per carton (kg):	5.4kg
Number of components:	3 pieces	Minimum order:	1000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	100,000 units = 0.098USD per unit
Year base price:	2013		1,000,000 units = 0.092 USD per unit
			10,000,000 units = 0.082 USD per unit

Comments:

Current PQS status: *pre-qualified ; 25 Jun 2013*

Valid until : *May 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/056

Description: Retractable AD syringe 0.5ml

Manufacturer's reference: Haiou Retractable auto disable syringe 0.5ml

Manufactured in: China; People's Republic of

Company: Guangdong Haiou Medical Apparatus Co., Ltd

Address: Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China

Telephone: +86-663-2758666

Email: sales@haiou.net.cn

Web address: <http://www.haiou.net.cn>

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3000
AD mechanism:	Plunger lock / needle retraction	Volume per carton (m3):	0.087m3
AD location:	Upon completion of injection	Weight per carton (kg):	13kg
Number of components:	3 pieces	Minimum order:	100,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2013		

Comments:

Current PQS status: pre-qualified ; 29 Jul 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/057
Description: AD syringe 0.05ml
Manufacturer's reference: AD syringe 0.05ml
Manufactured in: China; People's Republic of
Company: Anhui Tiangkang Medical Technology Co., Ltd
Address: 228, Weiye Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Telephone: +86 550 7022258
Email: marshall988@163.net
Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.05ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	2000
AD mechanism:	Plunger lock by stainless jaw at start of injection	Volume per carton (m3):	0.069 m3
AD location:	Start of injection	Weight per carton (kg):	10 kg
Number of components:	3 pieces	Minimum order:	200,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Upon request
Year base price:	2013		

Comments:

Current PQS status: pre-qualified ; 29 Jul 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/058
Description: AD syringe 0.25ml
Manufacturer's reference: Auto-disable syringe 0.25ml
Manufactured in: China; People's Republic of
Company: Anhui Tiangkang Medical Technology Co., Ltd
Address: 228, Weiye Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Telephone: +86 550 7022258
Email: marshall988@163.net
Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.25ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	2000
AD mechanism:	Plunger lock by stainless steel jaw at start of injection	Volume per carton (m3):	0.069 m3
AD location:	Start of injection	Weight per carton (kg):	10 kg
Number of components:	3 pieces	Minimum order:	200,000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	Upon request
Year base price:	2013		

Comments:

Current PQS status: pre-qualified ; 29 Jul 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/059
Description: AD syringe 0.25ml
Manufacturer's reference: OnejectII AD syringe 0.25ml
Manufactured in: Indonesia
Company: PT Oneject Indonesia
Address: Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.25ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	1600
AD mechanism:	Plunger lock	Volume per carton (m3):	0.051m3
AD location:	Upon completion of injection	Weight per carton (kg):	8.23kg
Number of components:	3 pieces	Minimum order:	16,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2013		

Comments:

Current PQS status: pre-qualified ; 06 Sep 2013

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/060
Description: AD syringe 0.5ml
Manufacturer's reference: Destroject 0.5ml AD (1000) syringe
Manufactured in: Pakistan
Company: AMSON VACCINES & PHARMA (PVT) LTD.
Address: 115, Industrial Triangle, Kahuta road, Islamabad Pakistan
Telephone: +92 51 4492022
Email: naveed@amson.org.pk
Web address: www.amson.org.pk

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	100
AD mechanism:	Plunger lock by cremailere at start	Volume per carton (m3):	0.097m3
AD location:	Start of injection	Weight per carton (kg):	12.5kg
Number of components:	3 pieces	Minimum order:	32,000
Other needle options:	Yes	Incoterms:	EXW
Primary packaging:	Blister pack	Prices per unit:	Upon request
Year base price:	2014		

Comments: Previously E008/042 requalified by Amson

Current PQS status: pre-qualified ; 01 Apr 2014

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/061
Description: AD syringe 0.5 mL
Manufacturer's reference: Single-jet AD syringe 0.5 mL
Manufactured in: Korea; Republic of (South Korea)
Company: MK Limited
Address: #439-14, Gakyo-ri, Songak-Myun, Dangjin-Gun, 343-821 Chungnam
Telephone: + 82 31 4988934
Email: info@monosafe.com
Web address: <http://www.monosafe.com>

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	1600
AD mechanism:	Plunger lock	Volume per carton (m3):	0.048 m3
AD location:	Middle of injection	Weight per carton (kg):	
Number of components:	3 pieces	Minimum order:	2 millions
Other needle options:	Yes	Incoterms:	EXW
Primary packaging:	Blister pack	Prices per unit:	On request to manufacturer
Year base price:	2014		

Comments: carton of 1600 units

Current PQS status: pre-qualified ; 30 May 2014

Valid until : May 2017

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/062
Description: AD syringe 0.5mL
Manufacturer's reference: Helmject® AD syringe 0.5mL
Manufactured in: China; People's Republic of
Company: HELM MEDICAL GMBH
Address: Nordkanalstraße 28
D- 20097
Hamburg
Germany
Telephone: +49 40 2375-2726
Email: info@helmag.com
Web address: www.helm-medical.com

Specifications

Graduations:	0.5ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	3000
AD mechanism:	metal clip	Volume per carton (m3):	0.087m3
AD location:	Start of injection	Weight per carton (kg):	13kg
Number of components:	3 pieces	Minimum order:	3000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2015		

Comments:

Current PQS status: pre-qualified ; 01 Jul 2015

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/063
Description: AD syringe 0.05mL
Manufacturer's reference: Helmject® Ad syringe 0.05mL
Manufactured in: China; People's Republic of
Company: HELM MEDICAL GMBH
Address: Nordkanalstraße 28
D- 20097
Hamburg
Germany
Telephone: +49 40 2375-2726
Email: info@helmag.com
Web address: www.helm-medical.com

Specifications

Graduations:	0.05ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3000
AD mechanism:	metal clip	Volume per carton (m3):	0.087m3
AD location:	Start of injection	Weight per carton (kg):	13kg
Number of components:	3 pieces	Minimum order:	3000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2015		

Comments:

Current PQS status: pre-qualified ; 01 Jul 2015

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/064
Description: AD syringe 0.1mL
Manufacturer's reference: Helmject® AD syringe 0.1mL
Manufactured in: China; People's Republic of
Company: HELM MEDICAL GMBH
Address: Nordkanalstraße 28
D- 20097
Hamburg
Germany
Telephone: +49 40 2375-2726
Email: info@helmag.com
Web address: www.helm-medical.com

Specifications

Graduations:	0.1ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3000
AD mechanism:	metal clip	Volume per carton (m3):	0.087m3
AD location:	Start of injection	Weight per carton (kg):	13kg
Number of components:	3 pieces	Minimum order:	3000
Other needle options:	Yes	Incoterms:	FCA
Primary packaging:	Blister pack	Prices per unit:	Upon request to manufacturer
Year base price:	2015		

Comments:

Current PQS status: pre-qualified ; 01 Jul 2015

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/065
Description: AD Syringe 0.1 mL
Manufacturer's reference: Oneject II AD Syringe 0.1 mL
Manufactured in: Indonesia
Company: PT Oneject Indonesia
Address: Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Telephone: +62 21 879 17 422
Email: marketing@oneject.co.id
Web address: www.oneject.co.id

Specifications

Graduations:	0.1ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	1600
AD mechanism:	Locked trapped piston	Volume per carton (m3):	0.09 m3/carton
AD location:	Upon completion of injection	Weight per carton (kg):	10.6 Kg
Number of components:		Minimum order:	1600
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	on request
Year base price:	2015		on request
			on request

Comments:

Current PQS status: pre-qualified ; 12 Sep 2015

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



PERFORMANCE QUALITY SAFETY



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/066
Description: AD syringe 0.5ml
Manufacturer's reference: Ramy AD syringe 0.5ml
Manufactured in: Saudi Arabia
Company: Al Shifa Medical Syringe MFG.Co.
Address: 1st Industrial City P.O. Box 7917
Dammam 31472
Saudi Arabia
Telephone: +966138474284
Email: info@alshifa.com
Web address: www.alshifa.com

Specifications

Graduations:	0.5ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	23G x 1" (0.60 x 25 mm)	Pieces per carton:	1000
AD mechanism:	Plunger lock	Volume per carton (m3):	0.06 per carton
AD location:	Upon completion of injection	Weight per carton (kg):	8.02 per carton
Number of components:	3 pieces	Minimum order:	1000
Other needle options:	Yes	Incoterms:	EXW
Primary packaging:	Blister pack	Prices per unit:	41 USD per carton
Year base price:	2015		

Comments:

Current PQS status: pre-qualified ; 22 Oct 2015

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E008: Auto-disable syringe for fixed dose immunization

PQS code:	E008/068
Description:	Retractable 0.05ml Auto Disable Syringe
Manufacturer's reference:	Haiou Retractable auto disable syringe 0.05ml
Manufactured in:	China; People's Republic of
Company:	Guangdong Haiou Medical Apparatus Co., Ltd
Address:	Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China
Telephone:	+86-663-2758666
Email:	sales@haiou.net.cn
Web address:	http://www.haiou.net.cn

Specifications

Graduations:	0.05ml	Quality standard:	ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	3600
AD mechanism:	Manual retractable	Volume per carton (m3):	0.094
AD location:	Upon completion of injection	Weight per carton (kg):	15
Number of components:	3 pieces	Minimum order:	100,000
Other needle options:	Yes	Incoterms:	FOB
Primary packaging:	Blister pack	Prices per unit:	Over 100,000 pcs: 0.07 USD
Year base price:	2017		Over 1 million pcs: 0.065 USD

Comments:

Current PQS status: *pre-qualified ; 01 Jun 2017*

Valid until : *May 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased

NEW Product AS AT 01.06.2017



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/069
Description: 0.05mlAD BCG syringe
Manufacturer's reference: MEDECO INJECT AD 0.05ml BCG
Manufactured in: United Arab Emirates
Company: Abu Dhabi Medical Devices Co. L.L.C
Address: P.O.Box 30485, Abu Dhabi
United Arab Emirates

Telephone: +971-2-6199100
Email: info@admd.ae
Web address: <http://www.admd.ae>

Specifications

Graduations:	0.05ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	1400
AD mechanism:	One way valve auto disable mechanism	Volume per carton (m3):	0.053 M3 for 1400 Pcs pack. 0.112 M3 for 3000 Pcs
AD location:	Start of injection	Weight per carton (kg):	5.46 Kg for 1400 Pcs pack and 11.1 Kg for 3000 Pcs
Number of components:	3 pieces	Minimum order:	1400
Other needle options:	Yes	Incoterms:	EXW
Primary packaging:	Blister pack	Prices per unit:	0.068 USD
Year base price:	2017		

Comments: Available in 1400 Pcs or 3000 Pcs per carton

Current PQS status: pre-qualified ; 01 Jun 2017

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased

NEW Product AS AT 01.06.2017



E008: Auto-disable syringe for fixed dose immunization

PQS code: E008/70
Description: 0.1ml AD BCG syringe
Manufacturer's reference: MEDECO INJECT AD 0.1ml BCG
Manufactured in: United Arab Emirates
Company: Abu Dhabi Medical Devices Co. L.L.C
Address: P.O.Box 30485, Abu Dhabi
United Arab Emirates

Telephone: +971-2-6199100
Email: info@admd.ae
Web address: <http://www.admd.ae>

Specifications

Graduations:	0.1ml	Quality standard:	ISO 9001, ISO 13485,
Syringe material(s):	Polypropylene	Markings:	CE mark
Fixed needle size:	27G x 3/8" (0.40 x 10 mm)	Pieces per carton:	1400
AD mechanism:	One way valve auto-disable mechanism	Volume per carton (m3):	0.053 M3 for 1400 Pcs pack. 0.112 M3 for 3000 Pcs
AD location:	Start of injection	Weight per carton (kg):	5.46 Kg for 1400 Pcs pack and 11.1 Kg for 3000 Pcs
Number of components:	3 pieces	Minimum order:	1400
Other needle options:	Yes	Incoterms:	EXW
Primary packaging:	Blister pack	Prices per unit:	0.068 USD
Year base price:	2017		

Comments: Available in two carton sizes 1400 Pcs or 3000 Pcs

Current PQS status: pre-qualified ; 01 Jun 2017

Valid until : May 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased

NEW Product AS AT 01.06.2017

E010

Waste management equipment

Waste disposal is a key element of any immunization programme. Poorly managed waste arising from immunization sessions exposes health workers and the community to infection and to injury. The cost of waste disposal must be incorporated into the budget and training plans of all immunization activities.

E010.1 Safety boxes

Puncture-resistant containers for the collection and disposal of used sharps, including disposable and auto-disable syringes, needles and other injection materials, must be provided and used for all immunization activities. These containers reduce the risk posed by contaminated needles and syringes both to health staff and the general population. Containers are available in a range of sizes.

The relevant PQS specification requires safety boxes to have a minimum capacity of 20 syringes per litre. This figure should be used to estimate need. It is good practice to order more boxes than the calculated minimum to take account of inefficiencies such as the premature collection of partly filled containers and the use of containers for purposes other than immunization. WHO recommends over-ordering by 150% to 200%¹.

E010.2 Incinerator boxes

WARNING: Incinerator boxes for on-site burning are no longer recommended by WHO. They have been excluded from the PQS because low temperature

¹ [WHO/V&B/02.11](#). *Guidelines for estimating costs of introducing new vaccines into the national immunization system.*

incineration releases toxic gases and this should be avoided. Controlled combustion above 800°C is needed to prevent this.

E010.3 Needle disablers

These devices are designed to cut the needle from a used syringe and to hold the offcuts in a disposable sharps container. Use of these devices can reduce the risk of needle-stick injury to workers dealing with the waste stream and also increase the effective capacity of safety boxes. Because the needles are removed, it also allows the use of cheaper alternative syringe containers.

WARNING: There are hazards associated with the use of needle disablers and their adoption requires careful evaluation of risks and benefits.

E010.4 Incinerators and autoclaves

Auto-combustion type incinerators, which achieve temperatures in excess of 800°C, are recommended for the final disposal of all contaminated sharps, including syringes and needles used for immunization. This equipment ensures the most complete destruction of used sharps while also causing minimal environmental pollution. Product information on incinerators and autoclaves is available at <http://www.healthcarewaste.org> which provides reference documents and links and gives guidance on decision-making.

A PQS specification and verification protocol for waste disposal autoclaves is currently under development.

E010 data sheets follow



E010: Waste management products

PQS code: E010/001
Description: Safety box 5L
Manufacturer's reference: POLYSAFE® 5L
Manufactured in: Norway
Company: POLYNOR AS
Address: Brennerigt. 3
P.O. Box 1273
N-2806 Gjøvik
Norway

Telephone: +47 61 13 89 30
Email: post@polynor.no
Web address: <http://www.polynor.no>

Specifications

Volume (Liter):	5 L	Syringe hole diameter (mm):	38 mm
Nominal syringe capacity:	155 units	Material:	recycled carton board
Dimensions before assembly (mm):	585 x 275 x 4.3 mm	Colour:	White
Dimensions after assembly (mm):	280 x 160 x 125 mm		
Weight empty (g):	280 g		
Minimum order:	25 units	Pieces per carton:	25 units
Year base price:	2008	Volume per carton:	0.02 m3
Price per unit:	On request	Weight per carton:	8 kg
		Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	108-21912-1 (April 2008)	Verification laboratory:	ForceTechnology
Comments:			
Current PQS status:	<i>pre-qualified; 10 Jul 2008</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code: E010/002
Description: Safety box 10L
Manufacturer's reference: POLYSAFE® 10L
Manufactured in: Norway
Company: POLYNOR AS
Address: Brennerigt. 3
P.O. Box 1273
N-2806 Gjøvik
Norway

Telephone: +47 61 13 89 30
Email: post@polynor.no
Web address: <http://www.polynor.no>

Specifications

Volume (Liter):	10 L	Syringe hole diameter (mm):	38 mm
Nominal syringe capacity:	306 syringes	Material:	Recycled carton board, water resistant
Dimensions before assembly (mm):	603 x 385 x 5.2 mm	Colour:	White
Dimensions after assembly (mm):	300 x 250 x 150 mm		
Weight empty (g):	486 g		
Minimum order:	15 units	Pieces per carton:	15 units
Year base price:	2008	Volume per carton:	0.02 m3
Price per unit:	On request	Weight per carton:	8 kg
		Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	108-21912-2 (April 2008)	Verification laboratory:	ForceTechnology
Comments:	Boxes of 15 units		
Current PQS status:	<i>pre-qualified; 10 Apr 2008</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code: E010/003
Description: Safety box 15L
Manufacturer's reference: POLYSAFE® 15L
Manufactured in: Norway
Company: POLYNOR AS
Address: Brennerigt. 3
P.O. Box 1273
N-2806 Gjøvik
Norway

Telephone: +47 61 13 89 30
Email: post@polynor.no
Web address: <http://www.polynor.no>

Specifications

Volume (Liter):	15 L	Syringe hole diameter (mm):	39 mm
Nominal syringe capacity:	450 units	Material:	Recycled carton board, water resistant
Dimensions before assembly (mm):	775 x 445 x 5.7 mm	Colour:	White
Dimensions after assembly (mm):	310 x 240 x 210 mm		
Weight empty (g):	680 g		
Minimum order:	10 units	Pieces per carton:	10 units per carton
Year base price:	2008	Volume per carton:	0.02 m3
Price per unit:	On request	Weight per carton:	8.1 kg
		Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	108-21912-3 (April 2008)	Verification laboratory:	ForceTechnology
Comments:	Boxes of 10 units		
Current PQS status:	<i>pre-qualified; 10 Jul 2008</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code: E010/004
Description: Safety box 5L
Manufacturer's reference: Pa-Hu Oy SB 5L
Manufactured in: Finland
Company: Pa-Hu Oy
Address: Teollisuustie 2,
FIN-02880 Veikkola,
Finland

Telephone: +358-20 789 1000

Email: sales@pa-hu.fi

Web address: <http://www.pa-hu.fi>

Specifications

Volume (Liter):	5 L	Syringe hole diameter (mm):	38 mm
Nominal syringe capacity:	130 units	Material:	solid carton board
Dimensions before assembly (mm):	570 x 250 x 2.53 mm	Colour:	Brown
Dimensions after assembly (mm):	280 x 145 x 165 mm		
Weight empty (g):	232 g		
Minimum order:	25 units	Pieces per carton:	25 units
Year base price:	2016	Volume per carton:	0.019 m3
Price per unit:	2000-9999: 0.70 €	Weight per carton:	7.0 kg
	10000 or more units: 0.50 €	Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	108-21655-1 (May 2008)	Verification laboratory:	ForceTechnology
Comments:	Carton of 25 units		
Current PQS status:	<i>pre-qualified; 05 Dec 2008</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code:	E010/006
Description:	Safety box 5L
Manufacturer's reference:	Kojak safety box 5L
Manufactured in:	India
Company:	Hindustan Syringes & Medical Devices Ltd.
Address:	174, Sector - 25, Ballabgarh - 121 004 (Haryana) India
Telephone:	+91 129-4061151/58
Email:	hmduk@hmdhealthcare.com
Web address:	www.hmdhealthcare.com

Specifications

Volume (Liter):	5 L	Syringe hole diameter (mm):	38 mm
Nominal syringe capacity:	100 units	Material:	Yellow duplex kraft board
Dimensions before assembly (mm):	585 x 285 x 4 mm	Colour:	Yellow
Dimensions after assembly (mm):	285 x 160 x 125 mm		
Weight empty (g):	275 g		
Minimum order:	25 units	Pieces per carton:	25 units
Year base price:	2016	Volume per carton:	0.016 m3
Price per unit:	0.53 US\$/pc	Weight per carton:	8.60 kg
		Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	108-32733-(20 April 2009)	Verification laboratory:	ForceTechnology
Comments:			
Current PQS status:	<i>pre-qualified; 28 Apr 2009</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code: E010/007
Description: Safety box 5L
Manufacturer's reference: Pa-Hu Oy SB squared 5L
Manufactured in: Finland
Company: Pa-Hu Oy
Address: Teollisuustie 2,
FIN-02880 Veikkola,
Finland

Telephone: +358-20 789 1000

Email: sales@pa-hu.fi

Web address: <http://www.pa-hu.fi>

Specifications

Volume (Liter):	5 L	Syringe hole diameter (mm):	38 mm
Nominal syringe capacity:	150 units	Material:	Solid carton board
Dimensions before assembly (mm):	600 x 144 x 3.98 mm	Colour:	Brown
Dimensions after assembly (mm):	315 x 128 x 145 mm		
Weight empty (g):	253 g		
Minimum order:	25 units	Pieces per carton:	25 units
Year base price:	2016	Volume per carton:	0.021 m3
Price per unit:	2000-9999: 0.70 €	Weight per carton:	7.7 kg
	10001 or more units: 0.50 €	Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	108-33979 (March 2009)	Verification laboratory:	ForceTechnology
Comments:			
Current PQS status:	<i>pre-qualified; 26 May 2009</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code:	E010/008
Description:	Safety box 2.5L
Manufacturer's reference:	Medibest Disposafe 2.5L
Manufactured in:	Indonesia
Company:	PT.Medibest Indonesia
Address:	Plaza Bona Indah, Office #A2-C4 Jalan Karang Tengah Raya Lebak Bulus – Cilandak Jakarta Selatan 12440, Indonesia
Telephone:	+62 21 765 3248
Email:	info@medibestgroup.com
Web address:	http://www.medibestgroup.com

Specifications

Volume (Liter):	2.5 L	Syringe hole diameter (mm):	40 mm with fringes
Nominal syringe capacity:	81 syringes	Material:	recycled board and virgin fiber
Dimensions before assembly (mm):	551 x 238 x 2.21 mm	Colour:	Yellow
Dimensions after assembly (mm):	238 x 127 x 116 mm		
Weight empty (g):	290 g		
Minimum order:	25	Pieces per carton:	25 units
Year base price:	2009	Volume per carton:	0.024 m3
Price per unit:	On request	Weight per carton:	7.5 kg
		Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	109-24758-1 (May 2009)	Verification laboratory:	ForceTechnology
Comments:	Carton of 25 units; custom made printing on demand		
Current PQS status:	<i>pre-qualified; 24 Jul 2009</i>	Valid until : <i>May, 2018</i>	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code:	E010/009
Description:	Safety box 5L
Manufacturer's reference:	Medibest Disposafe 5L
Manufactured in:	Indonesia
Company:	PT.Medibest Indonesia
Address:	Plaza Bona Indah, Office #A2-C4 Jalan Karang Tengah Raya Lebak Bulus – Cilandak Jakarta Selatan 12440, Indonesia
Telephone:	+62 21 765 3248
Email:	info@medibestgroup.com
Web address:	http://www.medibestgroup.com

Specifications

Volume (Liter):	5 L	Syringe hole diameter (mm):	40 mmwith fringes
Nominal syringe capacity:	142 syringes	Material:	recycled carton board and virgin fiber
Dimensions before assembly (mm):	660 x 238 x 2.21 mm	Colour:	Yellow
Dimensions after assembly (mm):	290 x 158 x 130 mm		
Weight empty (g):	376 g		
Minimum order:	25 units	Pieces per carton:	25 units
Year base price:	2009	Volume per carton:	0.029 m3
Price per unit:	On request	Weight per carton:	9 kg
		Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	109-24758.b (June 2009)	Verification laboratory:	ForceTechnology
Comments:	Carton of 25 units; custom printing on demand		
Current PQS status:	<i>pre-qualified; 24 Jul 2009</i>	Valid until : <i>May, 2018</i>	

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code:	E010/010
Description:	Safety box 5L
Manufacturer's reference:	Sol-Millennium Safety Box 5L
Manufactured in:	China; People's Republic of
Company:	Shanghai Sol-Millennium Medical Products Co. Ltd.
Address:	Room E, 11th Floor, East Hope Plaza, No.1777 Century Avenue, Pudong, Shanghai 200122, China
Telephone:	+86-21-68622586-17
Email:	Jane Nie, Jane@sol-m.com
Web address:	www.sol-m.com

Specifications

Volume (Liter):	5	Syringe hole diameter (mm):	38
Nominal syringe capacity:	150	Material:	cardboard
Dimensions before assembly (mm):	600 x 280 x 5.0	Colour:	Brown
Dimensions after assembly (mm):	288 x 165 x 130		
Weight empty (g):	270		
Minimum order:	5000	Pieces per carton:	25
Year base price:	2010	Volume per carton:	0.018 m3
Price per unit:	On request	Weight per carton:	8 kg
		Incoterms:	EXW
		Quality standard:	ISO 9001
Verification report:	110-29507 (August 2010)	Verification laboratory:	ForceTechnology
Comments:	Carton of 25 units		
Current PQS status:	<i>pre-qualified; 01 Nov 2010</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code: E010/011
Description: Safety box 5L
Manufacturer's reference: SB TimSafe 5L NE
Manufactured in: Sweden
Company: Smurfit Kappa Lagamill AB
Address: Box 43,
SE-285 21 Markaryd,
Sweden

Telephone: +46 433 181 12
Email: solidsales@smurfitkappa.se
Web address: <http://www.timboard.se>

Specifications

Volume (Liter):	5 Liter	Syringe hole diameter (mm):	38 mm
Nominal syringe capacity:	150 units	Material:	Recycled board and virgin fiber
Dimensions before assembly (mm):	468 x 260 x 4 mm	Colour:	White
Dimensions after assembly (mm):	154 x 113 x 315 mm		
Weight empty (g):	250 g		
Minimum order:	1500	Pieces per carton:	25 units
Year base price:	2014	Volume per carton:	0.013 m3
Price per unit:	1500 units: 0.89€ 15000 units and more: 0.75€	Weight per carton:	6.54 kg
		Incoterms:	FCA
		Quality standard:	ISO 9001
Verification report:	113-28810	Verification laboratory:	ForceTechnology
Comments:			
Current PQS status:	<i>pre-qualified; 24 Sep 2013</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code: E010/012
Description: Safety box 5L
Manufacturer's reference: Helmject Safety Box 5L
Manufactured in: Germany
Company: HELM MEDICAL GMBH
Address: Nordkanalstraße 28
D- 20097
Hamburg
Germany

Telephone: +49 40 2375-2726

Email: info@helmag.com

Web address: www.helm-medical.com

Specifications

Volume (Liter):	5	Syringe hole diameter (mm):	38.5
Nominal syringe capacity:	100	Material:	wood pulp paper
Dimensions before assembly (mm):	270 x 465 x 4	Colour:	natural brown
Dimensions after assembly (mm):	146 x 465 x 110		
Weight empty (g):	220g		
Minimum order:	1000	Pieces per carton:	25; 50; 100
Year base price:	2015	Volume per carton:	0.014m3
Price per unit:	Upon request	Weight per carton:	5.86 kg
		Incoterms:	FCA
		Quality standard:	ISO 13485
Verification report:	115-23735 rev.1	Verification laboratory:	ForceTechnology
Comments:			
Current PQS status:	<i>pre-qualified; 31 Jul 2015</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased



E010: Waste management products

PQS code:	E10 013
Description:	2.5L Safety Box
Manufacturer's reference:	PT. Tonnindo Eramulya 2.5L Safety Box
Manufactured in:	Indonesia
Company:	PT. Tonnindo Eramulya
Address:	Jl.Pembangunan III # 14E. Jakarta 10130 Indonesia

Telephone: +62 216321717

Email: tonnindo@cbn.net.id

Web address: <http://tonnindo.com>

Specifications

Volume (Liter):	2.5L	Syringe hole diameter (mm):	42mm
Nominal syringe capacity:	80	Material:	recycled board and virgin fibre, water resistant
Dimensions before assembly (mm):	530 x 230 x 28	Colour:	yellow
Dimensions after assembly (mm):	235 x 120 x 110		
Weight empty (g):	350		
Minimum order:	100	Pieces per carton:	25
Year base price:	2017	Volume per carton:	0.001m3
Price per unit:	> 10,000 USD 2.46	Weight per carton:	9kg
	>1,000 USD 2.93	Incoterms:	DDP
	<1,000 USD 2.98	Quality standard:	ISO 9001
Verification report:		Verification laboratory:	ForceTechnology
Comments:			
Current PQS status:	<i>pre-qualified; 18 Aug 2017</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn', this product is NOT to be purchased

E011

Specimen collection equipment

Currently there are no PQS specifications for specimen collection equipment. These will be developed in the near future in collaboration with other partners. Meanwhile, the PIS qualified equipment can still be obtained from UNICEF Supply Division.

E011.1 Stool specimen collection for AFP

The full procedures describing how to collect a stool specimen are explained in [WHO/EPI/GEN/95.01 Rev.1](#). *Field guide for supplementary activities aimed at achieving polio eradication.*

E011.2 Sending specimens via a 'reverse cold chain'

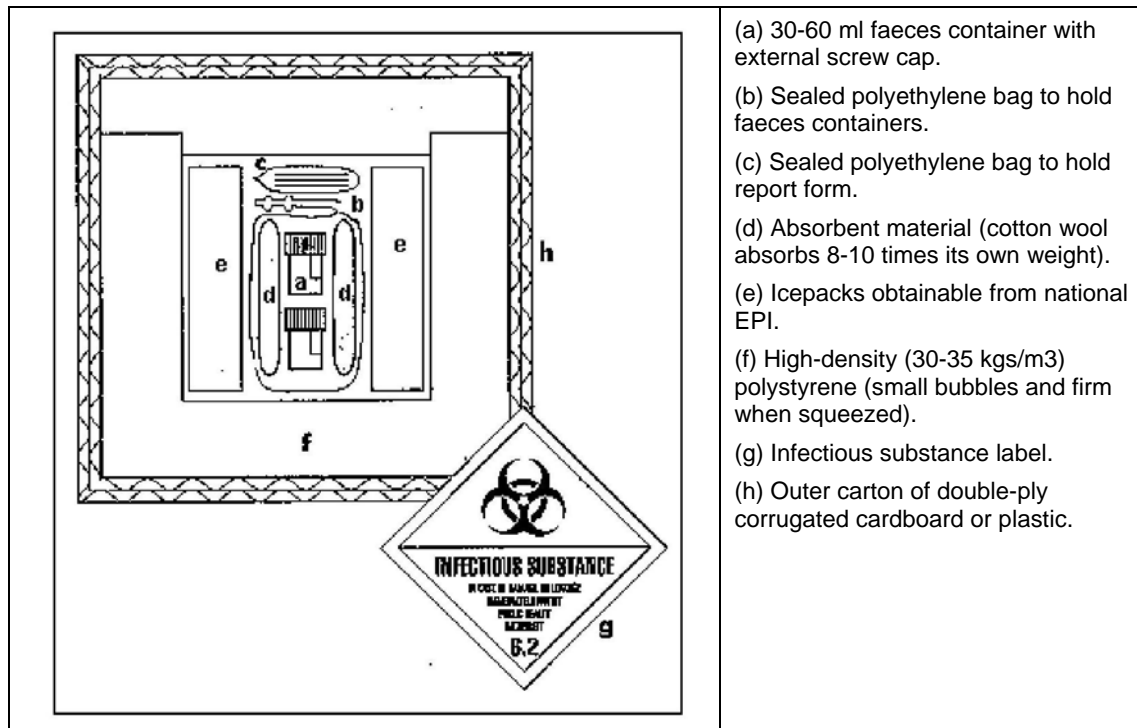
Poliovirus is sensitive to heat: the titre (virus concentration) is maintained at -20°C, but deteriorates when exposed to higher temperatures. The higher the titre, the more easily a laboratory can detect the virus. The possibility of detection therefore depends on the original titre, the duration and degree of post-collection exposure to higher temperatures and the quality of the laboratory. The first two aspects can be influenced in the field by timely collection and correct transport of stool specimens.

After collection, the specimens must be placed immediately in a refrigerator or, for shipment, in a cold box at 0°C to +8°C between frozen ice packs. Aim for the specimens to arrive at the laboratory within 72 hours of collection. If this is not possible, the specimens must be frozen at -20°C and then shipped frozen, preferably with dry ice or with cold packs that have also been frozen at -20°C. Try to limit repeated freezing and thawing to a minimum. This process of keeping the specimen refrigerated or frozen is called a 'reverse cold chain'. If a reverse cold chain is not properly maintained at all times during transport, polioviruses will not survive in the stool specimen.

E011.3 Basic rules for specimen storage and transport

- **Storage at 0°C - 8°C:** 3-4 days between collection and arrival at laboratory. (Check the cold life of the carrier in the product data sheet).
- **Storage at -20°C:** Indefinitely.
- Repeatedly freezing and thawing decreases the titre of the sample.
- Avoid storing samples in refrigerators or cold boxes used for vaccines or medicines.
- If separate storage is unavoidable, seal specimens in 2-3 layers of plastic bags and separate them properly from vaccines.

- Before packing the specimen carrier, disinfect the inside of the carrier with a solution of 1 part bleach to 10 parts water.
- Inform the receiving laboratory in advance.
- If sending by air, investigate procedures in advance.



Source: WHO/V&B/00.13. *Product Information Sheets*

E013

Therapeutic injection devices

The products listed in this new section include single-use syringes for therapeutic use. All PQS pre-qualified syringes in this category must now comply with ISO 7886-4: 2006 - *Sterile hypodermic syringes for single use - Part 4: Syringes with re-use prevention feature*.

The recommendations on safe disposal of used injection equipment given in the guidance notes to section E010 also apply to this category.

E013 data sheets follow



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/001
Description:	RUP syringe 2ml
Manufacturer's reference:	Kojak Seling 2ml
Manufactured in:	India
Company:	Hindustan Syringes & Medical Devices Ltd. 174, Sector - 25, Ballabgarh - 121 004 (Haryana) India
Address:	
Telephone:	+91 129-4061151/58
Email:	hmduk@hmdhealthcare.com
Web address:	www.hmdhealthcare.com

Specifications

Graduations:	0.1ml	Needle size:	23G x 1" (0.60 x 25.4 mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Locked/broken plunger	Primary packaging:	Paper or Ribbon pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2000	Volume per carton (m3):	0.09 m3
Minimum order:	18000	Weight per carton (kg):	14.5 kg
Year base price:	2016	Incoterms:	FCA
Price per unit:	Over 1 million: 0.06 USD; Over 5 millions: 0.0575	Over 10 millions: 0.0550 USD	Over 50 millions: 0.0525 USD
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Packs of 100 units Other needle sizes with detachable option available upon request		
Current PQS status:	pre-qualified; 24 Mar 2007 Valid until : May, 2018		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/002

Description: RUP Retractable 3 ml

Manufacturer's reference: Vanishpoint® Retractable syringe 3 ml

Manufactured in: United States

Company: Retractable Technologies, Inc.
511 Lobo Lane, Little Elm, TX 75068

Address:

Telephone: +1 972 294 1010

Email: rticlinical@vanishpoint.com

Web address: <http://www.vanishpoint.com/>

Specifications

Graduations:	0.1 ml	Needle size:	23G x 1" (25mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle into barrel by spring	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	600	Volume per carton (m3):	0.0432 m3
Minimum order:	600	Weight per carton (kg):	5.9 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	pre-qualified; 15 Jun 2005	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/005
Description:	RUP Retractable 1ml
Manufacturer's reference:	Vanishpoint® Retractable 1 ml Tuberculin
Manufactured in:	United States
Company:	Retractable Technologies, Inc.
Address:	511 Lobo Lane, Little Elm, TX 75068
Telephone:	+1 972 294 1010
Email:	rticlinical@vanishpoint.com
Web address:	http://www.vanishpoint.com/

Specifications

Graduations:	0.01 ml	Needle size:	27 g x 12.7 mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle into barrel by spring	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.0432 m3
Minimum order:	800	Weight per carton (kg):	4.59 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	on request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	pre-qualified; 16 Jun 2005	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/006

Description: RUP retractable 1ml

Manufacturer's reference: Vanishpoint® Retractable 1 ml

Manufactured in: China; People's Republic of

Company: Retractable Technologies, Inc.

Address: 511 Lobo Lane, Little Elm, TX 75068

Telephone: +1 972 294 1010

Email: rticlinical@vanishpoint.com

Web address: <http://www.vanishpoint.com/>

Specifications

Graduations:	0.01 ml	Needle size:	27G x 12.7 mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle into barrel by spring	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	800	Volume per carton (m3):	0.0432 m3
Minimum order:	800	Weight per carton (kg):	4.5 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a sharp injury Protection (SIP)		
Current PQS status:	pre-qualified; 15 Jun 2005		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/007

Description: RUP Retractable 10ml

Manufacturer's reference: Vanishpoint® Retractable 10ml

Manufactured in: China; People's Republic of

Company: Retractable Technologies, Inc.

Address: 511 Lobo Lane, Little Elm, TX 75068

Telephone: +1 972 294 1010

Email: rticlinical@vanishpoint.com

Web address: <http://www.vanishpoint.com/>

Specifications

Graduations:	0.2	Needle size:	21Gx1.5" (38mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle into barrel by spring	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.068 m3
Minimum order:	600	Weight per carton (kg):	9.7 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	<i>pre-qualified; 15 Jun 2005</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/008

Description: RUP Retractable 5ml

Manufacturer's reference: Vanishpoint® Retractable 5ml

Manufactured in: China; People's Republic of

Company: Retractable Technologies, Inc.

Address: 511 Lobo Lane, Little Elm, TX 75068

Telephone: +1 972 294 1010

Email: rticlinical@vanishpoint.com

Web address: <http://www.vanishpoint.com/>

Specifications

Graduations:	0.2 ml	Needle size:	21Gx1.5" (38mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle into barrel by spring	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.045 m3
Minimum order:	600	Weight per carton (kg):	8.2 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	pre-qualified; 16 Jun 2005		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/009

Description: RUP retractable 3ml

Manufacturer's reference: Vanishpoint® Retractable 3ml

Manufactured in: China; People's Republic of

Company: Retractable Technologies, Inc.

Address: 511 Lobo Lane, Little Elm, TX 75068

Telephone: +1 972 294 1010

Email: rticlinical@vanishpoint.com

Web address: <http://www.vanishpoint.com/>

Specifications

Graduations:	0.1 ml	Needle size:	23Gx1" (25mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction into barrel by spring	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.0432 m3
Minimum order:	600	Weight per carton (kg):	5.9 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	pre-qualified; 16 Jun 2005		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/010
Description: RUP syringe 5ml
Manufacturer's reference: BD SolomedTM 5ml (2 pieces)
Manufactured in: Spain
Company: Becton Dickinson
Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone: +1 201-847-5149
Email: Amardeep_Singh_Chahal@bd.com
Web address: <http://www.bd.com>

Specifications

Graduations:	0.2ml	Needle size:	21G x 1.5"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	2 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger rod blocked and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type II B		
Pieces per carton:	100	Volume per carton (m3):	0.103 m3
Minimum order:	1800	Weight per carton (kg):	12.28 kg
Year base price:	2005	Incoterms:	FOB
Price per unit:	On request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 25 Jun 2005* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/011

Description: RUP syringe 2ml

Manufacturer's reference: BD SoloMedTM 2ml (2 pieces)

Manufactured in: Spain

Company: Becton Dickinson

Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238

Telephone: +1 201-847-5149

Email: Amardeep_Singh_Chahal@bd.com

Web address: <http://www.bd.com>

Specifications

Graduations:	0.1ml	Needle size:	25G x 5/8"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	2 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger blocked and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type II B		
Pieces per carton:	100	Volume per carton (m3):	0.103 m3
Minimum order:	3000	Weight per carton (kg):	13.61 kg
Year base price:	2005	Incoterms:	FOB
Price per unit:	On request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 25 Jun 2005* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/012
Description: RUP syringe 10ml
Manufacturer's reference: BD SoloMed™ 10ml 2 pieces
Manufactured in: Spain
Company: Becton Dickinson
Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone: +1 201-847-5149
Email: Amardeep_Singh_Chahal@bd.com
Web address: <http://www.bd.com>

Specifications

Graduations:	0.5ml	Needle size:	23G x 1 1/4"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	2 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger blocked and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type II B		
Pieces per carton:	100	Volume per carton (m3):	0.103 m3
Minimum order:	1200	Weight per carton (kg):	12.40 kg
Year base price:	2005	Incoterms:	FOB
Price per unit:	On request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 25 Jun 2005* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/014

Description: RUP retractable 1ml Insulin

Manufacturer's reference: Vanishpoint® Retractable 1 ml Insulin

Manufactured in: United States

Company: Retractable Technologies, Inc.
511 Lobo Lane, Little Elm, TX 75068

Address:

Telephone: +1 972 294 1010

Email: rticlinical@vanishpoint.com

Web address: <http://www.vanishpoint.com/>

Specifications

Graduations:	unit dose	Needle size:	29G x 12.7 mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle into barrel by spring	Primary packaging:	Paper blister pack
RUP location:		CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	800	Volume per carton (m3):	0.0432 m3
Minimum order:	800	Weight per carton (kg):	4.5 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	pre-qualified; 15 Jun 2005		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/015
Description:	RUP retractable 1ml Insulin
Manufacturer's reference:	Vanishpoint® Retractable 1ml insulin
Manufactured in:	China; People's Republic of
Company:	Retractable Technologies, Inc.
Address:	511 Lobo Lane, Little Elm, TX 75068
Telephone:	+1 972 294 1010
Email:	rticlinical@vanishpoint.com
Web address:	http://www.vanishpoint.com/

Specifications

Graduations:	1 unit	Needle size:	29G x 12.7 mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle into barrel by spring	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.0432 m3
Minimum order:	800	Weight per carton (kg):	4.5 kg
Year base price:	2005	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	pre-qualified; 15 Jun 2005	Valid until :	May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/018
Description:	RUP syringe 5ml
Manufacturer's reference:	Kojak Seling 5ml
Manufactured in:	India
Company:	Hindustan Syringes & Medical Devices Ltd. 174, Sector - 25, Ballabgarh - 121 004 (Haryana) India
Address:	
Telephone:	+91 129-4061151/58
Email:	hmduk@hmdhealthcare.com
Web address:	www.hmdhealthcare.com

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2" (0.80 x 38 mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	locked/broken plunger	Primary packaging:	Paper or Ribbon pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.12 m3
Minimum order:	16800	Weight per carton (kg):	16 kg
Year base price:	2008	Incoterms:	FCA
Price per unit:	Over 1 million: 0.065USD; Over 5 millions: 0.0625	Over 10 millions: 0.06 USD	Over 50 millions: 0.0575 USD
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Packs of 100 units Other needle sizes with detachable option available upon request		
Current PQS status:	pre-qualified; 24 Feb 2008 Valid until : May, 2018		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/019
Description: RUP syringe 3ml
Manufacturer's reference: Oneject K1 3ml
Manufactured in: Indonesia
Company: PT Oneject Indonesia
Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Address: Bogor 16810,
Indonesia

Telephone: +62 21 879 17 422
Email: marketing@oneject.co.id
Web address: www.oneject.co.id

Specifications

Graduations:	0.1ml	Needle size:	23G x 1 1/4"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Locked & broken plunger	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.11 m3
Minimum order:	18000	Weight per carton (kg):	13.6 kg
Year base price:	2010	Incoterms:	FOB
Price per unit:	On request to manufacturer		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 07 May 2007*

Valid until : *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/020
Description:	RUP syringe 10ml
Manufacturer's reference:	Kojak Seling 10 ml
Manufactured in:	India
Company:	Hindustan Syringes & Medical Devices Ltd. 174, Sector - 25, Ballabgarh - 121 004 (Haryana) India
Address:	
Telephone:	+91 129-4061151/58
Email:	hmduk@hmdhealthcare.com
Web address:	www.hmdhealthcare.com

Specifications

Graduations:	0.5ml	Needle size:	21G x 1 1/2" (0.80 x 38mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked/broken plunger	Primary packaging:	Paper or Ribbon pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1000	Volume per carton (m3):	0.11 m3
Minimum order:	10000	Weight per carton (kg):	17.5 kg
Year base price:	2011	Incoterms:	FCA
Price per unit:	Over 1 million: 0.038 USD; Over 5 millions: 0.0365	Over 10 millions: 0.035 USD	Over 50 millions: 0.0335 USD
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Packs of 50 units or 100 units Other needle sizes available upon request		
Current PQS status:	pre-qualified; 08 Mar 2007		
	Valid until : May, 2018		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/023

Description: RUP syringe 1ml

Manufacturer's reference: Oneject K1 1ml

Manufactured in: Indonesia

Company: PT Oneject Indonesia
Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Address:

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	1 ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Locked & broken plunger	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.11 m3
Minimum order:	18000	Weight per carton (kg):	13.6 kg
Year base price:	2010	Incoterms:	FOB
Price per unit:	On request to manufacturer		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 07 May 2007*

Valid until : *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/024

Description: RUP syringe 5ml

Manufacturer's reference: Oneject K1 5ml

Manufactured in: Indonesia

Company: PT Oneject Indonesia
Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Address:

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger locked and broken	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.09m3
Minimum order:	12000	Weight per carton (kg):	11.1 kg
Year base price:	2008	Incoterms:	FOB
Price per unit:	On request to manufacturer		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 21 May 2007*

Valid until : *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/027

Description: RUP syringe 1ml

Manufacturer's reference: SoloShot™ IX 1ml syringe

Manufactured in: Spain

Company: Becton Dickinson

Address: 1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238

Telephone: +1 201-847-5149

Email: Amardeep_Singh_Chahal@bd.com

Web address: <http://www.bd.com>

Specifications

Graduations:	1 ml	Needle size:	22G x 25mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	2 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger locking clip	Primary packaging:	Paper blister pack
RUP location:	At start of injection	CE mark:	Yes
RUP type:	Type I A		
Pieces per carton:	200	Volume per carton (m3):	0.102 m3
Minimum order:	2400	Weight per carton (kg):	11.49 kg
Year base price:	2010	Incoterms:	FCA
Price per unit:	On request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 28 May 2007* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/029

Description: RUP syringe 3ml

Manufacturer's reference: Yushou 3ml

Manufactured in: China; People's Republic of

Company: Wuxi Yushou Medical Appliances Co., Ltd
No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Address:

Telephone: +86 (510)3777555

Email: mike@chinasyringe.com

Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.1ml	Needle size:	23G x 1 1/4"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock with clip	Primary packaging:	Paper blister pack
RUP location:	At start of injection	CE mark:	Yes
RUP type:	Type I A		
Pieces per carton:	200	Volume per carton (m3):	??
Minimum order:	1800	Weight per carton (kg):	13 kg
Year base price:	2007	Incoterms:	FOB
Price per unit:	On request to manufacturer		
Quality standard:	ISO 13485		
Comments:			
Current PQS status:	<i>pre-qualified; 27 May 2008</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/034

Description: RUP syringe 2ml

Manufacturer's reference: Haiou syringe 2ml

Manufactured in: China; People's Republic of

Company: Guangdong Haiou Medical Apparatus Co., Ltd

Address: Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China

Telephone: +86-663-2758666

Email: sales@haiou.net.cn

Web address: <http://www.haiou.net.cn>

Specifications

Graduations:	0.1ml	Needle size:	23G x 25mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger locked and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2400	Volume per carton (m3):	0.118 m3
Minimum order:	100000	Weight per carton (kg):	15.5 kg
Year base price:	2008	Incoterms:	FOB
Price per unit:	On request		
Quality standard:	- ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 30 Apr 2009* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/035

Description: RUP syringe 5ml

Manufacturer's reference: Haiou syringe 5ml

Manufactured in: China; People's Republic of

Company: Guangdong Haiou Medical Apparatus Co., Ltd

Address: Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China

Telephone: +86-663-2758666

Email: sales@haiou.net.cn

Web address: <http://www.haiou.net.cn>

Specifications

Graduations:	0.2ml	Needle size:	21G x 40mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock & break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.116 m3
Minimum order:	100000	Weight per carton (kg):	16 kg
Year base price:	2008	Incoterms:	FOB
Price per unit:	On request		
Quality standard:	- ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 30 Apr 2009* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/036

Description: RUP syringe 10ml

Manufacturer's reference: Haiou syringe 10ml

Manufactured in: China; People's Republic of

Company: Guangdong Haiou Medical Apparatus Co., Ltd

Address: Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China

Telephone: +86-663-2758666

Email: sales@haiou.net.cn

Web address: <http://www.haiou.net.cn>

Specifications

Graduations:	1ml	Needle size:	21G x 40mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger locked & break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.11 m3
Minimum order:	100000	Weight per carton (kg):	15.5 kg
Year base price:	2008	Incoterms:	FOB
Price per unit:	On request		

Quality standard: - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 30 Apr 2009* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/037
Description:	RUP syringe 3ml
Manufacturer's reference:	RG-Non resusable syringe 3ml
Manufactured in:	China; People's Republic of
Company:	RoyalGroup
Address:	ONB-E/2, Mehar Sons Estate, Talpur Road, Karachi-74000, Pakistan
Telephone:	+92-21-32400270 Ext. 234; +92-21-32470301
Email:	abdul.sajid@royalgroupweb.com
Web address:	http://www.royalgroupweb.com

Specifications

Graduations:	0.1ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2000	Volume per carton (m3):	0.123 m3
Minimum order:	100000	Weight per carton (kg):	17 kg
Year base price:	2009	Incoterms:	EXW
Price per unit:	On request		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Sole distributor of this device for Changzhou Tongda Medical Appliance Co.,Ltd. No.288 Sanhe Road, Sanhekou, Zhenglu Town, Wujin District, Changzhou, Jiangsu, China.		
Current PQS status:	<i>pre-qualified; 21 May 2009</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn'.			



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/038
Description:	RUP syringe 5ml
Manufacturer's reference:	RG Non reusable 5ml
Manufactured in:	China; People's Republic of
Company:	RoyalGroup
Address:	ONB-E/2, Mehar Sons Estate, Talpur Road, Karachi-74000, Pakistan
Telephone:	+92-21-32400270 Ext. 234; +92-21-32470301
Email:	abdul.sajid@royalgroupweb.com
Web address:	http://www.royalgroupweb.com

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger block and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2000	Volume per carton (m3):	0.0135 m3
Minimum order:	100000	Weight per carton (kg):	22 kg
Year base price:	2009	Incoterms:	EXW
Price per unit:	On request		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Sole distributor of this product for Changzhou Tongda Medical Appliance Co.,Ltd. No.288 Sanhe Road, Sanhekou, Zhenglu Town, Wujin District, Changzhou, Jiangsu, China.		
Current PQS status:	<i>pre-qualified; 21 May 2009</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn'.			



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/039
Description:	RUP syringe 20ml
Manufacturer's reference:	Kojak Seling 20ml
Manufactured in:	India
Company:	Hindustan Syringes & Medical Devices Ltd. 174, Sector - 25, Ballabgarh - 121 004 (Haryana) India
Address:	
Telephone:	+91 129-4061151/58
Email:	hmduk@hmdhealthcare.com
Web address:	www.hmdhealthcare.com

Specifications

Graduations:	1ml	Needle size:	21G x 1 1/2" (0.80 x 38 mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	locked/broken plunger	Primary packaging:	Paper or Ribbon pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	400	Volume per carton (m3):	0.103 m3
Minimum order:	4000	Weight per carton (kg):	13 kg
Year base price:	2011	Incoterms:	FCA
Price per unit:	Over 1 millions: 0.0350 USD	Over 5 millions: 0.0325 USD	Over 10 millions: 0.0300 USD
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Packs of 25 units Other needle sizes available upon request		
Current PQS status:	pre-qualified; 18 Jun 2009		
	Valid until : May, 2018		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/040
Description:	RUP syringe 5ml
Manufacturer's reference:	Revital 5ml
Manufactured in:	Kenya
Company:	Revital Healthcare Ltd. Pandia Street, Off Mwakilingo Road, Station area, PO Box 80813 Code 80100 Mombasa
Address:	
Telephone:	+254 41 2228962
Email:	info@revitalhcare.com
Web address:	www.revitalhealthcare.com

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger (gasket) lock	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	500000	Volume per carton (m3):	
Minimum order:	500000	Weight per carton (kg):	21.5 kg
Year base price:	2008	Incoterms:	FCA
Price per unit:	0.05 US\$		
Quality standard:	- ISO 13485 -		
Comments:	Plunger gasket can be provided in black or white		
Current PQS status:	<i>pre-qualified; 02 Sep 2009</i> Valid until : <i>May, 2018</i>		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/041

Description: RUP syringe 1ml

Manufacturer's reference: Yushou Syringe 1ml

Manufactured in: China; People's Republic of

Company: Wuxi Yushou Medical Appliances Co., Ltd
No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Address:

Telephone: +86 (510)3777555

Email: mike@chinasyringe.com

Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.05ml	Needle size:	25G x 20mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock with metallic clip	Primary packaging:	Paper blister pack
RUP location:	At start of injection	CE mark:	Yes
RUP type:	Type I A		
Pieces per carton:	200	Volume per carton (m3):	0.094 m3
Minimum order:	30000	Weight per carton (kg):	11 kg
Year base price:	2008	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	ISO 13485		
Comments:			
Current PQS status: <i>pre-qualified; 15 Sep 2009</i>		Valid until : <i>May, 2018</i>	

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/042

Description: RUP syringe 2ml

Manufacturer's reference: Revital syringe 2ml

Manufactured in: Kenya

Company: Revital Healthcare Ltd.
Pandia Street, Off Mawakilingo Road,
Station area, PO Box 80813
Code 80100
Mombasa

Address:

Telephone: +254 41 2228962

Email: info@revitalhcare.com

Web address: www.revitalhealthcare.com

Specifications

Graduations:	0.1ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger block and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.130 m3
Minimum order:	3500	Weight per carton (kg):	19.5 kg
Year base price:	2008	Incoterms:	FCA
Price per unit:	Per unit: 0.027 US\$		
Quality standard:	ISO 13485		
Comments:			
Current PQS status:	<i>pre-qualified; 08 Jan 2009</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/043

Description: RUP syringe 5ml

Manufacturer's reference: Revital syringe 5ml

Manufactured in: Kenya

Company: Revital Healthcare Ltd.
Pandia Street, Off Mwakilingo Road,
Station area, PO Box 80813
Code 80100
Mombasa

Address:

Telephone: +254 41 2228962

Email: info@revitalhcare.com

Web address: www.revitalhealthcare.com

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	2 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.128 m3
Minimum order:	2500	Weight per carton (kg):	17.6 kg
Year base price:	2008	Incoterms:	FCA
Price per unit:	Per unit: 0.0295 US\$		
Quality standard:	ISO 13485		
Comments:			
Current PQS status:	<i>pre-qualified; 08 Jan 2009</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/044
Description:	RUP retractable 1ml Tuberculin
Manufacturer's reference:	Safegard Retractable safety syringe 1ml Tuberculin
Manufactured in:	Hungary
Company:	Safegard Medical (Hungary) Kft Safegard Medical (Hungary) Kft Farkaslyuk
Address:	Joszerencset terv 15 3608 Hungary
Telephone:	+36 48 470758
Email:	filippif@safegardmedical.hu
Web address:	www.safegardmedical.com

Specifications

Graduations:	0.01ml	Needle size:	27G x 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.056 m3
Minimum order:	1000	Weight per carton (kg):	5.4 kg
Year base price:	2016	Incoterms:	FCA
Price per unit:	0.08 US\$/pc		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	<i>pre-qualified; 22 Feb 2010</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/045
Description:	RUP retractable 3ml
Manufacturer's reference:	Safegard Retractable Safety syringe 3ml
Manufactured in:	Hungary
Company:	Safegard Medical (Hungary) Kft Safegard Medical (Hungary) Kft Farkaslyuk
Address:	Joszerencset terv 15 3608 Hungary
Telephone:	+36 48 470758
Email:	filippif@safegardmedical.hu
Web address:	www.safegardmedical.com

Specifications

Graduations:	0.1ml	Needle size:	23G x 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.07 m3
Minimum order:	1000	Weight per carton (kg):	7.3 kg
Year base price:	2016	Incoterms:	FCA
Price per unit:	0.085 US\$/pc		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	<i>pre-qualified; 22 Feb 2010</i>	Valid until :	<i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/046
Description:	RUP retractable 5ml
Manufacturer's reference:	Safeguard Retractable Safety Syringe 5ml
Manufactured in:	Hungary
Company:	Safeguard Medical (Hungary) Kft Safeguard Medical (Hungary) Kft Farkaslyuk
Address:	Joszerencset terv 15 3608 Hungary
Telephone:	+36 48 470758
Email:	filippif@safeguardmedical.hu
Web address:	www.safeguardmedical.com

Specifications

Graduations:	0.2 ml	Needle size:	21G x 1 1/4"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction into barrel	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.12 m3
Minimum order:	1000	Weight per carton (kg):	9.68 kg
Year base price:	2016	Incoterms:	FCA
Price per unit:	0.09 US\$/pc		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	<i>pre-qualified; 22 Feb 2010</i>	Valid until :	<i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



E013:	Hypodermic syringes with reuse prevention feature
PQS code:	E013/047
Description:	RUP Retractable 3ml
Manufacturer's reference:	Sol-CareTM 3ml
Manufactured in:	China; People's Republic of
Company:	Shanghai Sol-Millennium Medical Products Co. Ltd.
Address:	Room E, 11th Floor, East Hope Plaza, No.1777 Century Avenue, Pudong, Shanghai 200122, China
Telephone:	+86-21-68622586-17
Email:	Jane Nie, Jane@sol-m.com
Web address:	www.sol-m.com

Specifications

Graduations:	0.1ml	Needle size:	25G x 25mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock in hub, needle retraction and plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.139 m3
Minimum order:	9000	Weight per carton (kg):	15.5 kg
Year base price:	2009	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	<i>pre-qualified; 19 Mar 2010</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013:	Hypodermic syringes with reuse prevention feature
PQS code:	E013/048
Description:	RUP retractable 5ml
Manufacturer's reference:	Sol-CareTM 5ml
Manufactured in:	China; People's Republic of
Company:	Shanghai Sol-Millennium Medical Products Co. Ltd.
Address:	Room E, 11th Floor, East Hope Plaza, No.1777 Century Avenue, Pudong, Shanghai 200122, China
Telephone:	+86-21-68622586-17
Email:	Jane Nie, Jane@sol-m.com
Web address:	www.sol-m.com

Specifications

Graduations:	0.2ml	Needle size:	21G x 38mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock in hub, needle retraction and plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.136 m3
Minimum order:	6000	Weight per carton (kg):	14 kg
Year base price:	2009	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	The retraction of the needle is considered as a reuse prevention feature (RUP) and a Sharp Injury Protection (SIP)		
Current PQS status:	<i>pre-qualified; 19 Mar 2010</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/051
Description:	RUP syringe 2ml
Manufacturer's reference:	Revital 2ml (2 piece)
Manufactured in:	Kenya
Company:	Revital Healthcare Ltd. Pandia Street, Off Mwakilingo Road, Station area, PO Box 80813 Code 80100 Mombasa
Address:	
Telephone:	+254 41 2228962
Email:	info@revitalhcare.com
Web address:	www.revitalhealthcare.com

Specifications

Graduations:	0.1ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	2 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	3500	Volume per carton (m3):	0.130 m3
Minimum order:	3500	Weight per carton (kg):	17.5 kg
Year base price:	2008	Incoterms:	FCA
Price per unit:	Up to 5 millions: 0.028 US\$	Up to 10 millions: 0.0275 US\$	
Quality standard:	ISO 13485		
Comments:			
Current PQS status:	<i>pre-qualified; 26 Apr 2010</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/053

Description: RUP syringe 2ml

Manufacturer's reference: Hongda syringe 2ml

Manufactured in: China; People's Republic of

Company: Jiangxi Hongda Medical Equipment Group Ltd
39 South Shengi Road
Jinxian county, Nanchang City
Jiangxi province
China; People's Republic of

Address:

Telephone: +86 791 85628828

Email: hongda008@jxhd.cn

Web address: <http://www.jxhd.cn>

Specifications

Graduations:	0.1ml	Needle size:	21G x 38mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger block and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1500	Volume per carton (m3):	0.106 m3
Minimum order:	525000	Weight per carton (kg):	17 kg
Year base price:	2016	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 13485 -		
Comments:	Option of 2000 pieces per cartons Other needle sizes available Fixed needle option available		
Current PQS status:	<i>pre-qualified; 09 Jun 2010</i> Valid until : <i>May, 2018</i>		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/054

Description: RUP syringe 5ml

Manufacturer's reference: Hongda syringe 5ml

Manufactured in: China; People's Republic of

Company: Jiangxi Hongda Medical Equipment Group Ltd
39 South Shengi Road
Jinxian county, Nanchang City
Jiangxi province
China; People's Republic of

Address:

Telephone: +86 791 85628828

Email: hongda008@jxhd.cn

Web address: <http://www.jxhd.cn>

Specifications

Graduations:	0.2ml	Needle size:	21G x 38mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger block and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1500	Volume per carton (m3):	0.124 m3
Minimum order:	525000	Weight per carton (kg):	19 kg
Year base price:	2009	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	ISO 13485		
Comments:			
Current PQS status: <i>pre-qualified; 09 Jun 2010</i>		Valid until : <i>May, 2018</i>	

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/055
Description:	RUP syringe 5ml
Manufacturer's reference:	Shifeng RUP syringe 5ml
Manufactured in:	China; People's Republic of
Company:	Chengdu Xinjin Shifeng Medical Apparatus Co, Ltd Chengdu Xinjin Shifeng Medical Apparatus & Instruments Co, Ltd
Address:	C-6, B Glorai Regent Garden #44 4th section South Renmin road Chengdu Sichuan China; People's Republic of
Telephone:	+86 2885170675
Email:	xjshifeng2011@163.com
Web address:	www.xjshifeng.com

Specifications

Graduations:	0.2ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked broken plunger	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1600	Volume per carton (m3):	0.122 m3
Minimum order:	1600	Weight per carton (kg):	17 kg
Year base price:	2009	Incoterms:	FCA
Price per unit:	0.055 USD		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 30 Aug 2010</i>		Valid until : <i>May, 2017</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/056

Description: RUP 1ml fixed dose

Manufacturer's reference: Kojak Seling 1 ml

Manufactured in: India

Company: Hindustan Syringes & Medical Devices Ltd.
174, Sector - 25, Ballabgarh - 121 004
(Haryana) India

Address:

Telephone: +91 129-4061151/58

Email: hmduk@hmdhealthcare.com

Web address: www.hmdhealthcare.com

Specifications

Graduations:	1 ml	Needle size:	24G x 25mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Locked/broken plunger	Primary packaging:	Paper or Ribbon pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I A		
Pieces per carton:	2000	Volume per carton (m3):	0.1 m3
Minimum order:	20000	Weight per carton (kg):	14.5 kg
Year base price:	2011	Incoterms:	FCA
Price per unit:	On request		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Packs of 100 units Needle size: 24G x 1" (0.55 x 25mm); other needle sizes available upon request		
Current PQS status:	pre-qualified; 16 Sep 2010 Valid until : May, 2018		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/057

Description: RUP 1ml Sanxin

Manufacturer's reference: YIXIN 1 ml

Manufactured in: China; People's Republic of

Company: Jiangxi Sanxin Medtec Co.,Ltd
999 Fushan Road, Xiaolan Economic Development Zone,
Nanchang, Jiangxi, P.C. 330200
China; People's Republic of

Address:

Telephone: +86 791 85988111

Email: sanxin-med@vip.163.com

Web address: www.sanxin-med.com

Specifications

Graduations:	1 ml	Needle size:	25G x 19 mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger locked	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	3000	Volume per carton (m3):	0.12 m3
Minimum order:	200000	Weight per carton (kg):	15 kg
Year base price:	2012	Incoterms:	FCA
Price per unit:	0.0395 USD		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 02 Sep 2010</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/058

Description: RUP syringe 5ml

Manufacturer's reference: Yushou® RUP 5ml

Manufactured in: China; People's Republic of

Company: Wuxi Yushou Medical Appliances Co., Ltd
No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Address:

Telephone: +86 (510)3777555

Email: mike@chinasyringe.com

Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.2 ml	Needle size:	21G x 1 1/2'
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Locked / broken plunger	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.103 m3
Minimum order:	1800	Weight per carton (kg):	13 kg
Year base price:	2011	Incoterms:	FCA
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 07 Mar 2011</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/062

Description: RUP 10ml (2 piece)

Manufacturer's reference: Revital® RUP 10ml 2 piece syringe

Manufactured in: Kenya

Company: Revital Healthcare Ltd.
Pandia Street, Off Mwakilingo Road,
Station area, PO Box 80813
Code 80100
Mombasa

Address:

Telephone: +254 41 2228962

Email: info@revitalhcare.com

Web address: www.revitalhealthcare.com

Specifications

Graduations:	0.5 ml	Needle size:	21G x 1.5"
Syringe material(s):	PPE, Polyethylene	Other needle options:	Yes
Number of components:	2 pieces	Needle fixation:	Detachable
RUP mechanism:	locked, broken plunger	Primary packaging:	Plastic ribbon
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.1874 m3
Minimum order:	18000	Weight per carton (kg):	19.8 kgs
Year base price:	2011	Incoterms:	EXW
Price per unit:	Over 1 million: 6.80 USD per pack	Over 5 millions: 6.60 USD per pack	Over 10 millions: 6.50 USD per pack
Quality standard:	ISO 13485		
Comments:			
Current PQS status:	<i>pre-qualified; 09 May 2011</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/063
Description:	RUP syringe 5ml
Manufacturer's reference:	5ml BD Emerald™ PRO RUP
Manufactured in:	Spain
Company:	Becton Dickinson
Address:	1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone:	+1 201-847-5149
Email:	Amardeep_Singh_Chahal@bd.com
Web address:	http://www.bd.com

Specifications

Graduations:	0.2 ml	Needle size:	21G x 40 mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locking gasket upon completion	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2000	Volume per carton (m3):	0.103 m3
Minimum order:	2000	Weight per carton (kg):	13.4 kg
Year base price:	2011	Incoterms:	FCA
Price per unit:	upon request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 31 May 2011</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/064

Description: RUP syringe 1ml

Manufacturer's reference: Sanzhong® 1ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.05 ml	Needle size:	27G x 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger locked at end of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2000	Volume per carton (m3):	0.072 m3
Minimum order:	200000	Weight per carton (kg):	10 kg
Year base price:	2011	Incoterms:	FOB
Price per unit:	Over 200 000 units: 0.0407 USD per unit	Over 1 000 000 units: 0.0399 USD per unit	Over 5 000 000 units: 0.0387 USD per unit
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 14 Sep 2011</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/065

Description: RUP syringe 2ml

Manufacturer's reference: Sanzhong® 2ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.1 ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked plunger at the end of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.0927 m3
Minimum order:	200000	Weight per carton (kg):	11 kg
Year base price:	2011	Incoterms:	FOB
Price per unit:	Over 200000 units: 0.0407 USD per unit	Over 1000000 units: 0.0399 USD per unit	Over 5000000 units: 0.0387 USD per unit
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 14 Sep 2011</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/066

Description: RUP syringe 5ml

Manufacturer's reference: Sanzhong® 5ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.2 ml	Needle size:	22G x 1 1/4"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked plunger at end of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.075 m3
Minimum order:	200000	Weight per carton (kg):	11 kg
Year base price:	2011	Incoterms:	FOB
Price per unit:	Over 200000 units: 0.0421 USD per unit	Over 1000000 units: 0.0412 USD per unit	Over 5000000 units: 0.0400 USD per unit
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 14 Sep 2011</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/067

Description: RUP syringe 10ml

Manufacturer's reference: Sanzhong® 10ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.5 ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked plunger at the end of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.075 m3
Minimum order:	200000	Weight per carton (kg):	14 kg
Year base price:	2011	Incoterms:	FOB
Price per unit:	Over 200,000 units: 0.0556 USD per unit	Over 1,000,000 units: 0.0545 USD per unit	Over 5,000,000 units: 0.0529 USD per unit
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 14 Sep 2011</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/068
Description:	RUP syringe 2ml
Manufacturer's reference:	Emerald TM PRO 2ml
Manufactured in:	Spain
Company:	Becton Dickinson
Address:	1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone:	+1 201-847-5149
Email:	Amardeep_Singh_Chahal@bd.com
Web address:	http://www.bd.com

Specifications

Graduations:	0.1 ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	locked gasket upon completion of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	3000	Volume per carton (m3):	0.103 m3
Minimum order:	3000	Weight per carton (kg):	13.39 kg
Year base price:	2010	Incoterms:	FCA
Price per unit:	upon request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	1 carton = 30 packs = 3000 units		
Current PQS status:	<i>pre-qualified; 21 Oct 2011</i> Valid until : <i>May, 2018</i>		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/069

Description: RUP syringe 3ml

Manufacturer's reference: SKIFA RUP syringe 3ml

Manufactured in: Indonesia

Company: Mitra Rajawali Banjaran, PT
JL. Raya Banjaran KM16
Bandung, Jawa Barat
Indonesia

Address:

Telephone: +62 22 594 0151

Email: yantomaunk@yahoo.co.id; iwans9948@gmail.com; erna_saptawati@yahoo.com

Web address: <http://www.mrb.co.id>

Specifications

Graduations:	0.1 ml	Needle size:	23G x 32mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger locked at end of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	No
RUP type:	Type I B		
Pieces per carton:	2000	Volume per carton (m3):	0.17m3
Minimum order:	20000	Weight per carton (kg):	15 kg
Year base price:	2011	Incoterms:	EXW
Price per unit:	upon request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Brand name: SKIFA		
Current PQS status:	<i>pre-qualified; 01 Dec 2011</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/070
Description:	RUP syringe 10ml
Manufacturer's reference:	10ml BD EmeraldTM PRO
Manufactured in:	Spain
Company:	Becton Dickinson
Address:	1 Becton Drive, Franklin Lakes, NJ 07417 USA MC238
Telephone:	+1 201-847-5149
Email:	Amardeep_Singh_Chahal@bd.com
Web address:	http://www.bd.com

Specifications

Graduations:	0.2 ml	Needle size:	21G x 40mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger blocked at bottom of barrel	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.1032 m3
Minimum order:	1200	Weight per carton (kg):	12.05 kg
Year base price:	2011	Incoterms:	FCA
Price per unit:	Upon request to mfr		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	100 units per secondary packaging		
Current PQS status:	<i>pre-qualified; 25 Jan 2012</i> Valid until : <i>May, 2018</i>		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/071
Description:	RUP syringe 2ml
Manufacturer's reference:	PAHF RUP syringe 2ml
Manufactured in:	Nigeria
Company:	Pan African Health Foundation East-West road, Rumuosi Port Harcourt, Rivers State Nigeria
Address:	
Telephone:	+234 8035954218 / 8060501316
Email:	awokoma@pahfadsyringe.org ; info@pahfadsyringe.org
Web address:	http://www.pahfadsyringe.org

Specifications

Graduations:	0.1 ml	Needle size:	23G x 25mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked/broken plunger	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.077 m3
Minimum order:	1200	Weight per carton (kg):	8.6 kg
Year base price:	2012	Incoterms:	EXW
Price per unit:	0.037 € per unit		
Quality standard:	- ISO 13485 -		
Comments:	Fixed needle upon request		
Current PQS status:	pre-qualified; 19 Mar 2012	Valid until :	May, 2017

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/072
Description:	RUP syringe 5ml
Manufacturer's reference:	PAHF RUP syringe 5ml
Manufactured in:	Nigeria
Company:	Pan African Health Foundation East-West road, Rumuosi Port Harcourt, Rivers State Nigeria
Address:	
Telephone:	+234 8035954218 / 8060501316
Email:	awokoma@pahfadsyringe.org ; info@pahfadsyringe.org
Web address:	http://www.pahfadsyringe.org

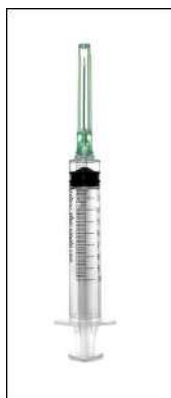
Specifications

Graduations:	0.2 ml	Needle size:	21G x 37.5mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked/broken plunger	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.101 m3
Minimum order:	1200	Weight per carton (kg):	10.8 kg
Year base price:	2012	Incoterms:	EXW
Price per unit:	0.040 € per unit		
Quality standard:	- ISO 13485 -		
Comments:	Fixed needle upon request		
Current PQS status:	pre-qualified; 19 Mar 2012	Valid until :	May, 2017

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/073
Description: RUP syringe 10ml
Manufacturer's reference: RUP 10ml
Manufactured in: China; People's Republic of
Company: Wuxi Yushou Medical Appliances Co., Ltd
No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province
Address:

Telephone: +86 (510)3777555
Email: mike@chinasyringe.com
Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.12 m3
Minimum order:	1200	Weight per carton (kg):	13 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		

Quality standard: - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 18 Jul 2012* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/074

Description: RUP retractable syringe 1ml

Manufacturer's reference: RUP retractable syringe 1ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.05ml	Needle size:	27G x 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger hooked to inner hub, retraction hub and needle, plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2000	Volume per carton (m3):	0.072 m3
Minimum order:	200000	Weight per carton (kg):	10 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 25 Jun 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/075

Description: RUP retractable syringe 2ml

Manufacturer's reference: RUP retractable syringe 2ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.1ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger hooked to inner syringe hub, retraction inner hub and needle, plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.0927 m3
Minimum order:	200000	Weight per carton (kg):	11 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 25 Jun 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/076

Description: RUP retractable syringe 5ml

Manufacturer's reference: RUP retractable syringe 5ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.2ml	Needle size:	22G x 1 1/4"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger hooked in inner hub, hub and needle retraction, plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.075 m3
Minimum order:	200000	Weight per carton (kg):	11 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 25 Jun 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/077

Description: RUP retractable syringe 10ml

Manufacturer's reference: RUP retractable syringe 10ml

Manufactured in: China; People's Republic of

Company: Anhui Tiankang Medical Technology Co., Ltd
228, Weiyi Road,
Economic Development Zone,
Tianchang City,
Anhui Province
China; People's Republic of

Address:

Telephone: +86 550 7022258

Email: marshall988@163.net

Web address: <http://www.tkmedical.com>

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger hooked to inner hub, hub and needle retraction, plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.075 m3
Minimum order:	200000	Weight per carton (kg):	14 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 25 Jun 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/078

Description: RUP syringe 2ml

Manufacturer's reference: Neoject Reuse Prevention 2ml

Manufactured in: China; People's Republic of

Company: Neomedic Limited
97 High Street
Rickmansworth
Hertfordshire
WD3 1EF,
United Kingdom

Address:

Telephone: +44 1923 836379

Email: marketing@neomedic.co.uk

Web address: <http://www.neomedic.co.uk/>

Specifications

Graduations:	0.2ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock and breakage	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.0927m3
Minimum order:	100000	Weight per carton (kg):	11kg
Year base price:	2012	Incoterms:	EXW
Price per unit:	0.04708USD per unit		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 29 Jun 2012* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/079

Description: RUP syringe 5ml

Manufacturer's reference: Neoject Reuse Prevention 5ml

Manufactured in: China; People's Republic of

Company: Neomedic Limited
97 High Street
Rickmansworth
Hertfordshire
WD3 1EF,
United Kingdom

Address:

Telephone: +44 1923 836379

Email: marketing@neomedic.co.uk

Web address: <http://www.neomedic.co.uk/>

Specifications

Graduations:	0.2ml	Needle size:	22G x 1 1/4"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock and breakage	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.0750 m3
Minimum order:	100000	Weight per carton (kg):	12 kg
Year base price:	2012	Incoterms:	EXW
Price per unit:	0.04972USD		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 29 Jun 2012* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/080
Description:	RUP syringe 10ml
Manufacturer's reference:	Neoject Reuse Prevention 10ml
Manufactured in:	China; People's Republic of
Company:	Neomedic Limited 97 High Street Rickmansworth Hertfordshire WD3 1EF, United Kingdom
Address:	
Telephone:	+44 1923 836379
Email:	marketing@neomedic.co.uk
Web address:	http://www.neomedic.co.uk/

Specifications

Graduations:	0.2ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock and breakage	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.1208 m3
Minimum order:	100000	Weight per carton (kg):	14 kg
Year base price:	2012	Incoterms:	EXW
Price per unit:	0.0678 USD per unit		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 29 Jun 2012</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/083

Description: RUP syringe 3ml

Manufacturer's reference: Yeso-med 3ml

Manufactured in: China; People's Republic of

Company: Wuxi Yushou Medical Appliances Co., Ltd
No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Address:

Telephone: +86 (510)3777555

Email: mike@chinasyringe.com

Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.1 ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	plunger lock and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1500	Volume per carton (m3):	0.11m3
Minimum order:	1500	Weight per carton (kg):	12 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 08 Oct 2012</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/084

Description: RUP syringe 2ml

Manufacturer's reference: Apple K1 RUP 2ml

Manufactured in: Pakistan

Company: AMSON VACCINES & PHARMA (PVT) LTD.
115, Industrial Triangle, Kahuta road,
Islamabad
Pakistan

Address:

Telephone: +92 51 4492022

Email: naveed@amson.org.pk

Web address: www.amson.org.pk

Specifications

Graduations:	0.1ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock & break at completion of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.07 m3
Minimum order:	100000	Weight per carton (kg):	8.62 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	On request to manufacturer		
Quality standard:	- ISO 9001 -		
Comments:			
Current PQS status:	<i>pre-qualified; 02 Nov 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/085

Description: RUP syringe 5ml

Manufacturer's reference: Apple K1 RUP 5ml

Manufactured in: Pakistan

Company: AMSON VACCINES & PHARMA (PVT) LTD.
115, Industrial Triangle, Kahuta road,
Islamabad
Pakistan

Address:

Telephone: +92 51 4492022

Email: naveed@amson.org.pk

Web address: www.amson.org.pk

Specifications

Graduations:	0.2ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock at completion of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.09 m3
Minimum order:	100000	Weight per carton (kg):	10.47 kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	On request to manufacturer		
Quality standard:	- ISO 9001 -		
Comments:			
Current PQS status:	<i>pre-qualified; 02 Nov 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/086

Description: RUP syringe 2ml

Manufacturer's reference: Yeso-med 2ml

Manufactured in: China; People's Republic of

Company: Wuxi Yushou Medical Appliances Co., Ltd
No.215 Xigang Road,
Dongbeitang town,
Wuxi city Jiangsu Province

Address:

Telephone: +86 (510)3777555

Email: mike@chinasyringe.com

Web address: <http://www.chinasyringe.com>

Specifications

Graduations:	0.1ml	Needle size:	23G X 25mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Piston lock upon completion	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1500	Volume per carton (m3):	0.11m3
Minimum order:	1500	Weight per carton (kg):	12kg
Year base price:	2012	Incoterms:	FOB
Price per unit:	upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 17 Dec 2012</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/087
Description:	RUP syringe 2ml
Manufacturer's reference:	Q-Safe® 2-3ml
Manufactured in:	Qatar
Company:	Qatari German Company for Medical Devices
Address:	P.O.Box 22556 ABU HAMOUR DOHA, STATE OF QATAR
Telephone:	+974 44581201
Email:	sales@qgmd.com
Web address:	www.qgmd.com

Specifications

Graduations:	0.1ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Retraction of needle and plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1000	Volume per carton (m3):	0.08m3
Minimum order:	100000	Weight per carton (kg):	4.2kg
Year base price:	2013	Incoterms:	EXW
Price per unit:	0.067USD		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	100 units per pack		
Current PQS status:	pre-qualified; 25 Apr 2013		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013:	Hypodermic syringes with reuse prevention feature
PQS code:	E013/088
Description:	RUP syringe 5ml
Manufacturer's reference:	Q-Safe® 5-6ml
Manufactured in:	Qatar
Company:	Qatari German Company for Medical Devices
Address:	P.O.Box 22556 ABU HAMOUR DOHA, STATE OF QATAR
Telephone:	+974 44581201
Email:	sales@qgmd.com
Web address:	www.qgmd.com

Specifications

Graduations:	0.5ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction and plunger break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1000	Volume per carton (m3):	0.09m3
Minimum order:	100000	Weight per carton (kg):	6.5kg
Year base price:	2013	Incoterms:	EXW
Price per unit:	0.080USD		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 25 Apr 2013</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/089
Description:	RUP retractable syringe 3ml
Manufacturer's reference:	Haiou RUP retractable safety syringe 3ml
Manufactured in:	China; People's Republic of
Company:	Guangdong Haiou Medical Apparatus Co., Ltd
Address:	Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China
Telephone:	+86-663-2758666
Email:	sales@haiou.net.cn
Web address:	http://www.haiou.net.cn

Specifications

Graduations:	0.1ml	Needle size:	23G x 25mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock and needle retraction	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2400	Volume per carton (m3):	0.118 m3
Minimum order:	100000	Weight per carton (kg):	17kg
Year base price:	2013	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		

Comments:

Current PQS status:	<i>pre-qualified; 05 Jun 2013</i>	Valid until :	<i>May, 2018</i>
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Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/090
Description:	RUP retractable 5ml
Manufacturer's reference:	Haiou RUP retractable safety syringe 5ml
Manufactured in:	China; People's Republic of
Company:	Guangdong Haiou Medical Apparatus Co., Ltd
Address:	Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China
Telephone:	+86-663-2758666
Email:	sales@haiou.net.cn
Web address:	http://www.haiou.net.cn

Specifications

Graduations:	0.2ml	Needle size:	21G x 38mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	plunger lock and needle retraction	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.122m3
Minimum order:	100000	Weight per carton (kg):	18kg
Year base price:	2013	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 05 Jun 2013</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/091
Description:	RUP retractable 10ml
Manufacturer's reference:	Haiou RUP retractable safety syringe 10ml
Manufactured in:	China; People's Republic of
Company:	Guangdong Haiou Medical Apparatus Co., Ltd
Address:	Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China
Telephone:	+86-663-2758666
Email:	sales@haiou.net.cn
Web address:	http://www.haiou.net.cn

Specifications

Graduations:	0.5ml	Needle size:	21G x 38mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock and needle retraction	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.110m3
Minimum order:	100000	Weight per carton (kg):	17kg
Year base price:	2013	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 05 Jun 2013</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/092

Description: RUP Insulin 1ml

Manufacturer's reference: OnejectII RUP insulin 1ml

Manufactured in: Indonesia

Company: PT Oneject Indonesia
Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Address:

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.02ml	Needle size:	27G x 3/8"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1600	Volume per carton (m3):	0.051m3
Minimum order:	16000	Weight per carton (kg):	8.23kg
Year base price:	2013	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 05 Jun 2013</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/093

Description: RUP syringe 3ml

Manufacturer's reference: OnejectII RUP 3ml

Manufactured in: Indonesia

Company: PT Oneject Indonesia
Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Address:

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.1ml	Needle size:	23G x 1 ¼"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	plunger lock and break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1600	Volume per carton (m3):	0.087m3
Minimum order:	18000	Weight per carton (kg):	12.20kg
Year base price:	2013	Incoterms:	FOB
Price per unit:	Upon request to manufacturer		

Quality standard: - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 05 Jun 2013*

Valid until : *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/096

Description: RUP retractable 1ml

Manufacturer's reference: Haiou RUP retractable safety syringe 1ml

Manufactured in: China; People's Republic of

Company: Guangdong Haiou Medical Apparatus Co., Ltd

Address: Nanyuan Industrial Zone, North Liusha, Puning, Guangdong, China

Telephone: +86-663-2758666

Email: sales@haiou.net.cn

Web address: <http://www.haiou.net.cn>

Specifications

Graduations:	0.01ml	Needle size:	29G x 12mm
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger locked to needle hub upon completion of injection and needle retraction into barrel	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	3000	Volume per carton (m3):	0.101m3
Minimum order:	100000	Weight per carton (kg):	16kg
Year base price:	2013	Incoterms:	FOB
Price per unit:	Upon request		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 10 Jul 2013</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/097

Description: RUP syringe 2ml

Manufacturer's reference: YI XIN RUP 2ml

Manufactured in: China; People's Republic of

Company: Jiangxi Sanxin Medtec Co.,Ltd
999 Fushan Road, Xiaolan Economic Development Zone,
Nanchang, Jiangxi, P.C. 330200
China; People's Republic of

Address:

Telephone: +86 791 85988111

Email: sanxin-med@vip.163.com

Web address: www.sanxin-med.com

Specifications

Graduations:	0.1ml	Needle size:	25G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.10 - 0.13 m3
Minimum order:	200000	Weight per carton (kg):	10 - 12 kg
Year base price:	2013	Incoterms:	FCA
Price per unit:	Upon request of manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Secondary package can also contain 2400 syringes		
Current PQS status:	<i>pre-qualified; 11 Sep 2013</i> Valid until : <i>May, 2018</i>		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/098

Description: RUP syringe 5ml

Manufacturer's reference: YI XIN RUP 5ml

Manufactured in: China; People's Republic of

Company: Jiangxi Sanxin Medtec Co.,Ltd
999 Fushan Road, Xiaolan Economic Development Zone,
Nanchang, Jiangxi, P.C. 330200
China; People's Republic of

Address:

Telephone: +86 791 85988111

Email: sanxin-med@vip.163.com

Web address: www.sanxin-med.com

Specifications

Graduations:	0.2ml	Needle size:	25G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Plunger lock	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.10 m3
Minimum order:	200000	Weight per carton (kg):	7 kg
Year base price:	2013	Incoterms:	FCA
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 11 Sep 2013* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/099

Description: RUP syringe 3ml

Manufacturer's reference: Medeco® Inject RUP 3ml

Manufactured in: United Arab Emirates

Company: Abu Dhabi Medical Devices Co. L.L.C
P.O.Box 30485, Abu Dhabi

Address: United Arab Emirates

Telephone: +971-2-6199100

Email: info@admd.ae

Web address: <http://www.admd.ae>

Specifications

Graduations:	0.1ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Valve in needle hub	Primary packaging:	Paper blister pack
RUP location:	At start of injection	CE mark:	Yes
RUP type:	Type I A		
Pieces per carton:	900	Volume per carton (m3):	0.074m3
Minimum order:	1000000	Weight per carton (kg):	4.2kg
Year base price:	2013	Incoterms:	EXW
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Nominal capacity 2ml, graduations to 3ml		
Current PQS status:	pre-qualified; 07 Nov 2013		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/100
Description: RUP syringe 5ml
Manufacturer's reference: Medeco® Inject RUP 5ml
Manufactured in: United Arab Emirates
Company: Abu Dhabi Medical Devices Co. L.L.C
P.O.Box 30485, Abu Dhabi
Address: United Arab Emirates

Telephone: +971-2-6199100

Email: info@admd.ae

Web address: <http://www.admd.ae>

Specifications

Graduations:	0.1ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Valve in needle hub	Primary packaging:	Paper blister pack
RUP location:	At start of injection	CE mark:	Yes
RUP type:	Type I A		
Pieces per carton:	800	Volume per carton (m3):	0.073m3
Minimum order:	1000000	Weight per carton (kg):	4.9kg
Year base price:	2013	Incoterms:	EXW
Price per unit:	Upon request to manufacturer		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 07 Nov 2013* Valid until : *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/101

Description: RUP retractable 1ml

Manufacturer's reference: Yixin retractable 1ml

Manufactured in: China; People's Republic of

Company: Jiangxi Sanxin Medtec Co.,Ltd
999 Fushan Road, Xiaolan Economic Development Zone,
Nanchang, Jiangxi, P.C. 330200
China; People's Republic of

Address:

Telephone: +86 791 85988111

Email: sanxin-med@vip.163.com

Web address: www.sanxin-med.com

Specifications

Graduations:	0.02ml	Needle size:	29G x 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction into barrel	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	3000	Volume per carton (m3):	0.11m3
Minimum order:	100000	Weight per carton (kg):	15.5 kg
Year base price:	2013	Incoterms:	FCA
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		

Comments:

Current PQS status: *pre-qualified; 03 Dec 2013* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/102

Description: RUP retractable 3ml

Manufacturer's reference: Yixin retractable 3ml

Manufactured in: China; People's Republic of

Company: Jiangxi Sanxin Medtec Co.,Ltd
999 Fushan Road, Xiaolan Economic Development Zone,
Nanchang, Jiangxi, P.C. 330200
China; People's Republic of

Address:

Telephone: +86 791 85988111

Email: sanxin-med@vip.163.com

Web address: www.sanxin-med.com

Specifications

Graduations:	0.1ml	Needle size:	25G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction into barrel	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2400	Volume per carton (m3):	0.15m3
Minimum order:	100000	Weight per carton (kg):	17 kg
Year base price:	2013	Incoterms:	FCA
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 03 Dec 2013</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/103

Description: RUP retractable 5ml

Manufacturer's reference: YIXIN® retractable 5ml

Manufactured in: China; People's Republic of

Company: Jiangxi Sanxin Medtec Co.,Ltd
999 Fushan Road, Xiaolan Economic Development Zone,
Nanchang, Jiangxi, P.C. 330200
China; People's Republic of

Address:

Telephone: +86 791 85988111

Email: sanxin-med@vip.163.com

Web address: www.sanxin-med.com

Specifications

Graduations:	0.2ml	Needle size:	23G x 1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Needle retraction into barrel	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.09m3
Minimum order:	100000	Weight per carton (kg):	14kg
Year base price:	23013	Incoterms:	FCA
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 03 Dec 2013</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/104

Description: RUP retractable 10ml

Manufacturer's reference: YIXIN® retractable 10ml

Manufactured in: China; People's Republic of

Company: Jiangxi Sanxin Medtec Co.,Ltd
999 Fushan Road, Xiaolan Economic Development Zone,
Nanchang, Jiangxi, P.C. 330200
China; People's Republic of

Address:

Telephone: +86 791 85988111

Email: sanxin-med@vip.163.com

Web address: www.sanxin-med.com

Specifications

Graduations:	0.5ml	Needle size:	21G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Needle retraction into barrel	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	800	Volume per carton (m3):	0.11m3
Minimum order:	100000	Weight per carton (kg):	13kg
Year base price:	2013	Incoterms:	FCA
Price per unit:	Upon request to manufacturer		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 03 Dec 2013</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/105

Description: RUP 2mL

Manufacturer's reference: Helmject® RUP syringe 2mL

Manufactured in: China; People's Republic of

Company: HELM MEDICAL GMBH
Nordkanalstraße 28
D- 20097
Hamburg
Germany

Address:

Telephone: +49 40 2375-2726

Email: info@helmag.com

Web address: www.helm-medical.com

Specifications

Graduations:	0.2 mL	Needle size:	21Gx1 ½" (38mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	2400	Volume per carton (m3):	0.127m3
Minimum order:	2400	Weight per carton (kg):	13kg
Year base price:	2016	Incoterms:	FCA
Price per unit:	0.06 US\$		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 01 Jul 2015* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/106

Description: RUP 5mL

Manufacturer's reference: Helmject® RUP syringe 5mL

Manufactured in: China; People's Republic of

Company: HELM MEDICAL GMBH
Nordkanalstraße 28
D- 20097
Hamburg
Germany

Address:

Telephone: +49 40 2375-2726

Email: info@helmag.com

Web address: www.helm-medical.com

Specifications

Graduations:	0.2mL	Needle size:	21Gx1 ½" (38mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1800	Volume per carton (m3):	0.137m3
Minimum order:	1800	Weight per carton (kg):	13kg
Year base price:	2016	Incoterms:	FCA
Price per unit:	0.05 US\$		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 01 Jul 2015* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/107
Description: RUP 10mL
Manufacturer's reference: Helmject® syringe 10mL
Manufactured in: China; People's Republic of
Company: HELM MEDICAL GMBH
Nordkanalstraße 28
D- 20097
Hamburg
Germany
Address:
Telephone: +49 40 2375-2726
Email: info@helmag.com
Web address: www.helm-medical.com

Specifications

Graduations:	0.5mL	Needle size:	21Gx1 1/2" (38mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger lock	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.120m3
Minimum order:	1200	Weight per carton (kg):	13kg
Year base price:	2015	Incoterms:	FCA
Price per unit:	Upon request to manufacturer		

Quality standard: - ISO 9001 - ISO 13485 -

Comments:

Current PQS status: *pre-qualified; 01 Jul 2015* **Valid until :** *May, 2018*

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/108

Description: RUP Syringe 2 mL

Manufacturer's reference: Oneject II RUP Syringe 2 mL

Manufactured in: Indonesia

Company: PT Oneject Indonesia
Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Address:

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.1 mL	Needle size:	23G x 1 ¼"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Locked trapped piston	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type II A		
Pieces per carton:	1600	Volume per carton (m3):	0.09 m3
Minimum order:	1600	Weight per carton (kg):	10.6 Kg
Year base price:	2015	Incoterms:	FOB
Price per unit:	on request	on request	on request
Quality standard:	- ----- - ISO 9001 - ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 21 Sep 2015</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/109

Description: RUP syringe 5 mL

Manufacturer's reference: Oneject II RUP Syringe 5 mL

Manufactured in: Indonesia

Company: PT Oneject Indonesia
Sentul Industrial Estate
Jl.Olympic Raya Kav B9
Bogor 16810,
Indonesia

Address:

Telephone: +62 21 879 17 422

Email: marketing@oneject.co.id

Web address: www.oneject.co.id

Specifications

Graduations:	0.1 mL	Needle size:	21G x 1 ½"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Locked trapped piston	Primary packaging:	Paper blister pack
RUP location:	At start of injection	CE mark:	Yes
RUP type:	Type II A		
Pieces per carton:	1200	Volume per carton (m3):	0.08 m3
Minimum order:	1200	Weight per carton (kg):	12 Kg
Year base price:	2015	Incoterms:	FOB
Price per unit:	On request	On request	On request
Quality standard:	- ----- - ISO 9001 - ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 21 Sep 2015</i>		Valid until : <i>May, 2018</i>
Note: If Current PQS status is 'Suspended' or 'Withdrawn',			



E013: Hypodermic syringes with reuse prevention feature

PQS code:	E013/110
Description:	RUP 1ml
Manufacturer's reference:	SKIFA RUP 1ml
Manufactured in:	Indonesia
Company:	Mitra Rajawali Banjaran, PT
Address:	JL. Raya Banjaran KM16 Bandung, Jawa Barat Indonesia
Telephone:	+62 22 594 0151
Email:	yantomaunk@yahoo.co.id ; iwans9948@gmail.com ; erna_saptawati@yahoo.com
Web address:	http://www.mrb.co.id

Specifications

Graduations:	0.05mL	Needle size:	26G x 1/2 "
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Hooked to hub at end of injection	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.142m3
Minimum order:	10000	Weight per carton (kg):	11.88kg
Year base price:	2015	Incoterms:	EXW
Price per unit:	24cts		
Quality standard:	- ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 07 May 2015</i>	Valid until :	<i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/111

Description: RUP 5ml

Manufacturer's reference: SKIFA RUP 5ml

Manufactured in: Indonesia

Company: Mitra Rajawali Banjaran, PT
JL. Raya Banjaran KM16
Bandung, Jawa Barat
Indonesia

Address:

Telephone: +62 22 594 0151

Email: yantomaunk@yahoo.co.id; iwans9948@gmail.com; erna_saptawati@yahoo.com

Web address: <http://www.mrb.co.id>

Specifications

Graduations:	0.2mL	Needle size:	22G x 1 1/2"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Detachable
RUP mechanism:	Hooked in hub at end of injection	Primary packaging:	Plastic ribbon
RUP location:	Upon completion of injection	CE mark:	No
RUP type:	Type I B		
Pieces per carton:	100	Volume per carton (m3):	0.710 m3
Minimum order:	10000	Weight per carton (kg):	14.02kg
Year base price:	2015	Incoterms:	EXW
Price per unit:	28 cts		
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:			
Current PQS status:	<i>pre-qualified; 07 May 2015</i>		Valid until : <i>May, 2018</i>

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/112
Description: RUP Syringe 10ml
Manufacturer's reference: 10 ml Alshifa RUP Syringe
Manufactured in: Saudi Arabia
Company: Al Shifa Medical Syringe MFG.Co.
1st Industrial City P.O. Box 7917
Dammam 31472
Saudi Arabia
Address:
Telephone: +966138474284
Email: info@alshifa.com
Web address: www.alshifa.com

Specifications

Graduations:	1ml	Needle size:	21G x 1.5" (0.80 x 38mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger Lock & Break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	450	Volume per carton (m3):	0.061 m3
Minimum order:	100000	Weight per carton (kg):	7.522 kg
Year base price:	2016	Incoterms:	EXW
Price per unit:	0.0516		0.0516
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Pack of 50 units. Other needle sizes available upon request		
Current PQS status:	pre-qualified; 04 Oct 2016		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



PERFORMANCE QUALITY SAFETY



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/113
Description: RUP Syringe 5ml
Manufacturer's reference: 5 ml Alshifa RUP Syringe
Manufactured in: Saudi Arabia
Company: Al Shifa Medical Syringe MFG.Co.
1st Industrial City P.O. Box 7917
Dammam 31472
Saudi Arabia
Address:
Telephone: +966138474284
Email: info@alshifa.com
Web address: www.alshifa.com

Specifications

Graduations:	0.5 ml	Needle size:	23G x1"(0.60 x 25.4mm)
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger Lock & Break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	800	Volume per carton (m3):	0.073 m3
Minimum order:	100000	Weight per carton (kg):	8.696 kg
Year base price:	2016	Incoterms:	EXW
Price per unit:	0.0415 USD		0.0415 USD
Quality standard:	- ----- - ISO 9001 - ISO 13485 -		
Comments:	Pack of 100 units. Other needle sizes available upon request		
Current PQS status:	<i>pre-qualified; 04 Oct 2016</i> Valid until : <i>May, 2018</i>		

Note: If Current PQS status is 'Suspended' or 'Withdrawn',



E013: Hypodermic syringes with reuse prevention feature

PQS code: E013/114

Description: RUP Syringe 3ml

Manufacturer's reference: 3 ml Alshifa RUP Syringe

Manufactured in: Saudi Arabia

Company: Al Shifa Medical Syringe MFG.Co.
1st Industrial City P.O. Box 7917
Dammam 31472
Saudi Arabia

Address:

Telephone: +966138474284

Email: info@alshifa.com

Web address: www.alshifa.com

Specifications

Graduations:	0.1 ml	Needle size:	23G x1"
Syringe material(s):	Polypropylene	Other needle options:	Yes
Number of components:	3 pieces	Needle fixation:	Fixed
RUP mechanism:	Plunger Lock & Break	Primary packaging:	Paper blister pack
RUP location:	Upon completion of injection	CE mark:	Yes
RUP type:	Type I B		
Pieces per carton:	1200	Volume per carton (m3):	0.061 m3
Minimum order:	100000	Weight per carton (kg):	8.02 kg
Year base price:	2016	Incoterms:	EXW
Price per unit:	0.395 USD		0.395 USD
Quality standard:	- ISO 9001 - ISO 13485 -		
Comments:	Pack of 100 units. Other needle sizes available upon request		
Current PQS status:	pre-qualified; 04 Oct 2016		Valid until : May, 2018

Note: If Current PQS status is 'Suspended' or 'Withdrawn',

General notes

The PQS catalogue (including the data sheets contained therein and individually accessible on the PQS website) is updated regularly. Following their submission to WHO for independent verification, products are added to the PQS catalogue as and when such products are - at the time of verification - found to comply with the applicable standards and/or performance specifications and verification protocols current at the time of submission.

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The PQS catalogue does not provide an exhaustive overview of products for use in immunization programmes. The PQS catalogue includes only those products which have been independently assessed in accordance with PQS verification procedures and found to meet the requirements of the relevant PQS performance specifications.

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- the products which have been found to meet the relevant PQS performance specifications will continue to do so; and/or that
- the products included in the PQS catalogue have obtained marketing authorization for their specified use or any other use in any country of the world, or that their use is otherwise in accordance with the national laws and regulations of any country, including but not limited to patent laws.

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- Procurement organizations using the PQS catalogue for procurement purposes remain solely responsible for the procurement of products included in the PQS catalogue, including for ensuring the quality of the products to be delivered to them, for performing other aspects of qualification prior to purchasing, such as ensuring the

financial stability and standing of the supplier, the ability to supply the required quantities and other related aspects, and for ensuring that the products they wish to procure have obtained the required marketing authorizations.

Guideline revision history

Date	Change summary	Reason for change	Approved
15 April 2011	First publication		