



laminarmedica

insulated
shipping
systems

A total solution
to the problem
of shipping
temperature
sensitive products
worldwide

THERMO PORTER®

Flat-pack, re-usable insulated
shipping systems





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Laminar Medica Limited are the UK and European market leaders specialising in the design, manufacture and validation of insulated shipping systems used by the pharmaceutical and biotech industries globally. These systems protect vaccines, drugs, blood and associated medical products from the extremes of temperature during transportation.

Conventionally moulded shipping systems do not have re-use capability, but their limited robustness, return carriage costs and stocking volume generally preclude re-use for anything more than local area application. Laminar Medica's ThermoPorter®, however, has been specifically developed for multiple re-use. The flat-pack construction facilitates cost-effective return shipping and high-tech vacuum insulation keeps efficiency up and bulk down.

C&M SCIENTIFIC

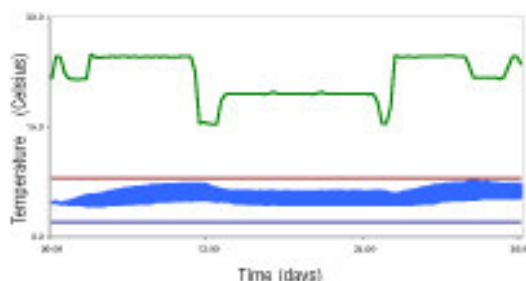
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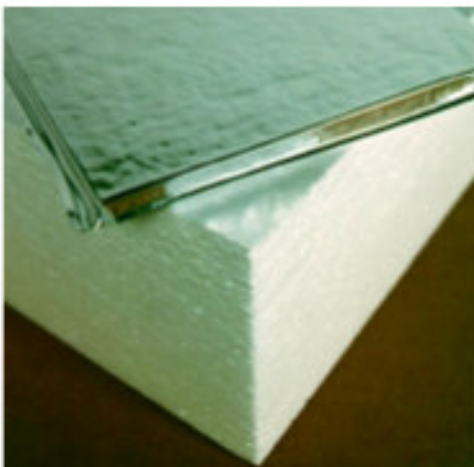
Applications

- Wherever there is a Return to Base (RTB) infrastructure.
- Local or national distribution for pharmacies, blood services, couriers, organ and tissue transportation.
- Cross border where an RTB infrastructure exists.
- Vaccination programs.
- Can be validated for multiple openings.



The graph above shows 2-8°C performance of a ThermoPorter® during a 36 hour transit period.

The photograph below demonstrates the difference in thickness between a VacTherm® panel and its thermal equivalent, constructed from standard insulation material.



Features

- Available in a range of sizes.
- Systems can be configured and validated for specific applications
- Dismantled for storage or return and reconstructed for re-use in seconds.
- Robust, wipe-clean material can be disinfected.
- Insulated with VacTherm® panels
- Contains tamper-proof locking tabs.

ThermoPorter® Benefits

ThermoPorter can reduce overall shipper costs and enhance shipper performance by:

- Reducing shipment costs per unit by increasing product payload for the same size shipper
- Providing better protection against more extreme ambients.
- Significantly extending shipment durations.
- Re-using all of the system.

VacTherm® Technology Benefits

Vacuum Insulated Panels (VIPs) are a relatively new technology, consisting of a filler material (core) encapsulated in a barrier film for protection, evacuated to between 0.0013 to 1.3mb and sealed.

Key Features of VIPs

- 5 to 8 times the insulating value of Expanded Polystyrene.
- Lightweight.
- Thin walled (see comparative illustration, left).
- VIP panels are environmentally friendly.

ThermoPorter® Patent Pending No. 0217331.8



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ISO 9001:2000
FM20012