

FOR PHARMA USE · DEEPFROZEN · 25 HOURS SHIPMENT

FOR PHARMA USE

PCM'S SUITED FOR PHARMA PRODUCTS

Frilotech develop and produce efficient thermal packaging designed to fit most ranges of products and at the same time takes into account the climate in which they are transported and stored. Temperature–sensitive goods at –18 to –25 °C are despatched safely, quickly and economically with this solution.

Please notice that all of our solutions have been testet without any payload (worst case).
All tests are performed after the European norm AFNOR NF S99-700 or stricter.

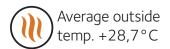
To make sure our pre-qualified system solutions fit our customers needs, we always calculate the performance needed for each case, depending on the individual transport plans provided by our customers.





PRE-QUALIFIED SYSTEM SOLUTION

SUMMER PERFORMANCE TEST 1



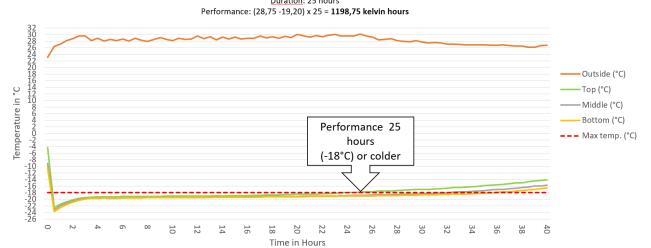


EPP thermo bulk solution

Live test 1. 17-12 – 19-12-2020. 76 liter bulk solution

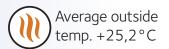
Performance: Average <u>outside</u> temp. 28,75°C

Average <u>inside</u> temp. -19,20°C <u>Duration</u>: 25 hours



PRE-QUALIFIED SYSTEM SOLUTION

SUMMER PERFORMANCE TEST 2



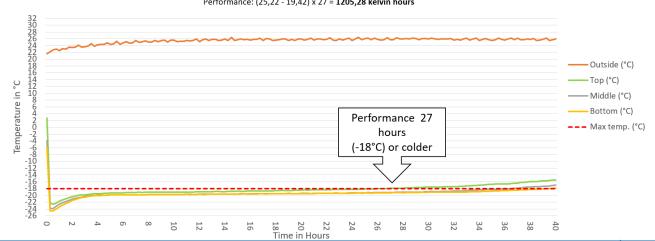


EPP thermo bulk solution

Live test 2. 02-01 – 04-01-2021. <u>76 liter</u> bulk solution

Performance: Average outside temp. 25,22°C Average inside temp. -19,42°C **Duration: 27 hours**

Performance: (25,22 - 19,42) x 27 = 1205,28 kelvin hours



HIGH PERFORMANCE REUSABLE EPP THERMO SHIPPER

PRODUCT DETAILS

-18 to -25°C ->25 hours - Summer scenario test 1.

-18 to -25 °C -> 27 hours - Summer scenario test 2.

Strong reusable thermobox made of EPP (Memoryfoam).

Outside dimensions: 800 x 595 x 680 mm Inside dimensions: 660 x 455 x 420 mm

Wall thickness: 70 mm

Inside dimensions of payload area: 580 x 379 x 347 mm

Inside dimensions of payload area: 76 Liters.

Cooling agent: 6 x +22 PCM's

(phase changing material) accumulators.

Total weight of packaging including PCM's: 35,4 kgs. For easy handling the EPP shipper can be moved

with a pallet lifter.

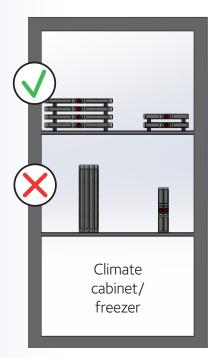


PRECONDITIONING OF PCM'S



-30°C FOR AT LEAST 48 HOURS

Before packing the PCM's in the EPP box they need to be frozen/stored at -30°C FOR AT LEAST 48 HOURS or intill the PCM's are completly hardended, then pack immediatly.



It is very important that the PCM's are loaded in flat position and space between them

PACKING INSTRUCTION

HALF EUROPALLET OUTSIDE AND 76 LITER PAYLOAD AREA INSIDE

- 1 For easy handling place the two PCM's in the sides first.
- 2 Then place the one in the bottom.
- 3 Place the cardboard box in the middle.
- 4 In each end of the cardboard place the smaller PCM's.
- 5 Then the last PCM on the top.
- 6 Last place the EPP lid on the box and seal it with straps.



