



PELICAN
BioThermal™

Smaller volume PCM bulk shipper solves Insulin delivery challenge to Africa

Transporting Insulin from Denmark to Democratic Republic of Congo

Missionpharma was requesting delivery of Insulin to their warehouse in Goma, DRC. Due to airport size and services to Goma, it was decided that the shipment would go to Kigali, Rwanda by air and trucked to Goma.

This required Missionpharma to source a packaging solution that would keep the products at temperature range between 2-8 degrees Celsius throughout the transit time without any excursions.

Shippers from Pelican BioThermal are used regularly to transport vital temperature sensitive products by air to their clients. As the end-users are often situated in remote areas, it was vital for the client to find a supplier of passive temperature packaging with the ability of hibernation during transport. The transit time during transport are often longer than 120 hours, which means that temperature controlled trucks are often used in the multimodal transport to ensure products arrive without breach of the cold chain.

The decision was made to use CoolPall™ Flex from Pelican BioThermal, as the ability to hibernate would provide sufficient security of temperature as the transit time was 7 days.

The routing planned was:

- *Trucking from warehouse in Lyngø, Denmark to Copenhagen airport, Denmark*
- *Airfreight from Copenhagen airport, Denmark to Amsterdam airport, Netherlands*
- *Stored at keep cool facility until flight departure*
- *Airfreight from Amsterdam airport, Netherlands to Kigali airport, Rwanda*
- *Stored at keep cool facility until truck pickup*
- *Trucking in temperature controlled vehicle from Kigali airport, Rwanda to Goma warehouse, DRC*

After arrival the temperature monitor data was returned to Missionpharma for review of the cold chain. The CoolPall™ Flex products lived up to the clients expectations without any excursions of the temperature throughout the transport. The client was very satisfied with the performance of CoolPall™ Flex and continue to use them on more sensitive multimodal transports.

About Missionpharma

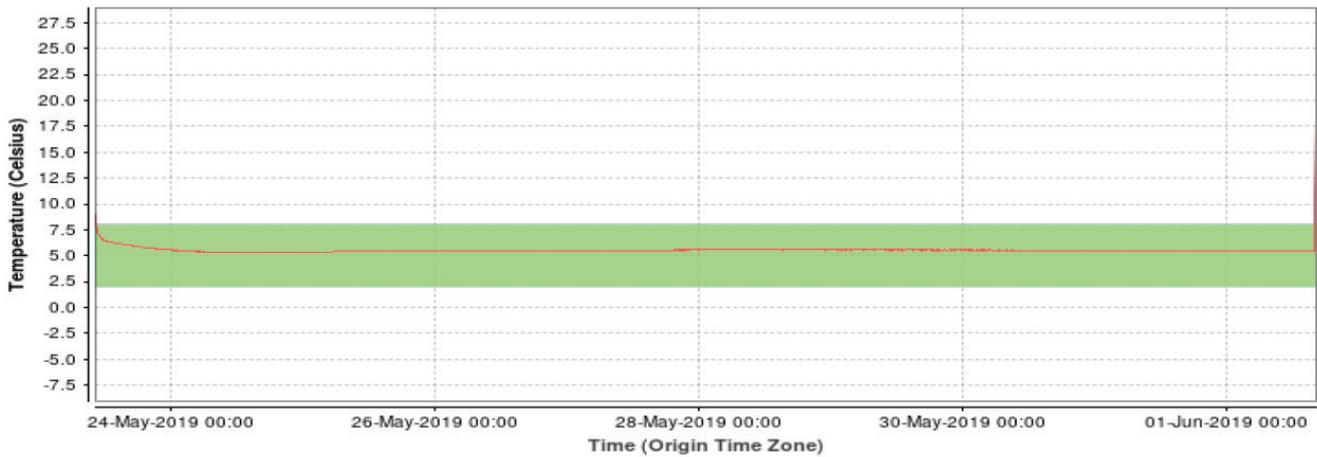
Established in 1975, Missionpharma is a leading supplier of generic pharmaceuticals, medical consumables and hospital equipment to public institutions in developing countries worldwide.

Their clients include, among others, ministries of health, international funders and NGOs. They provide safe and affordable products and solutions, which are built on a deep insight and decades of experience.

Their headquarters are located in Lyngø, north of Copenhagen, and have subsidiaries and regional offices in India, China and Africa as well as local representatives in more than 30 countries worldwide. Missionpharma is a part of the French company, Eurapharma, owned by the CFAO Group.

Their logistics services constitute an integrated part of the products they deliver. As a result, they have established a global logistics organisation with a team of specialists, who cooperate closely with the appointed international freight forwarders to develop the best possible solutions to match customer needs and ensure that shipments are always handled in a professional and cost-effective manner.

Product Performance - Denmark to Democratic Republic of Congo



About CoolPall™ Flex from Pelican BioThermal

CoolPall™ Flex a range of high-performance bulk shippers, available in ISO and EURO footprints from Pelican BioThermal. CoolPall™ Flex is highly customisable, allowing users to tailor their shipper to specific shipping lanes or performance requirements, to achieve the optimal thermal protection at lowest overall cost.

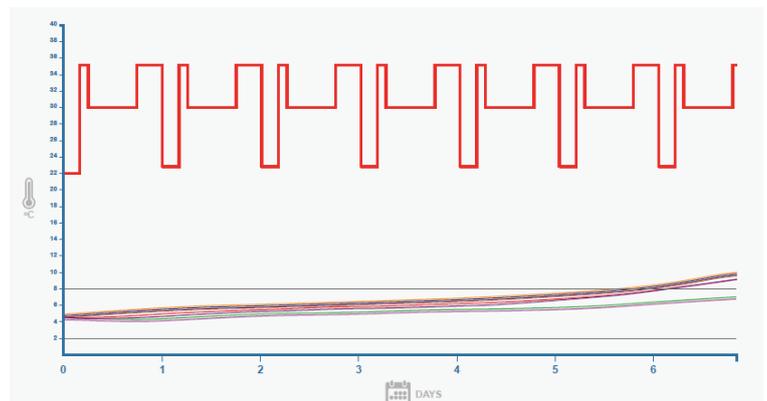
Models incorporate either polystyrene or VIP's, water or PCM coolants in single or double configurations, in 3 different sizes:- NBA - (Narrow Bodied Aircraft), HH - (Half Height), FH - (Full Height).

CoolPall™ Flex is designed to ensure maximum protection and ease of pack out through the use of common components. CoolPall™ Flex is lightweight, extremely quick to build and offers superior temperature stability in excess of 140 hours.



Performance Chart

CoolPall Flex Advance ISO S4, Half Height, Double Pod, tested to ISTA7D Hot profile



FOR MORE INFORMATION ABOUT PELICAN BIOTHERMAL PRODUCTS, PLEASE CONTACT:

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