

INTRODUCING...

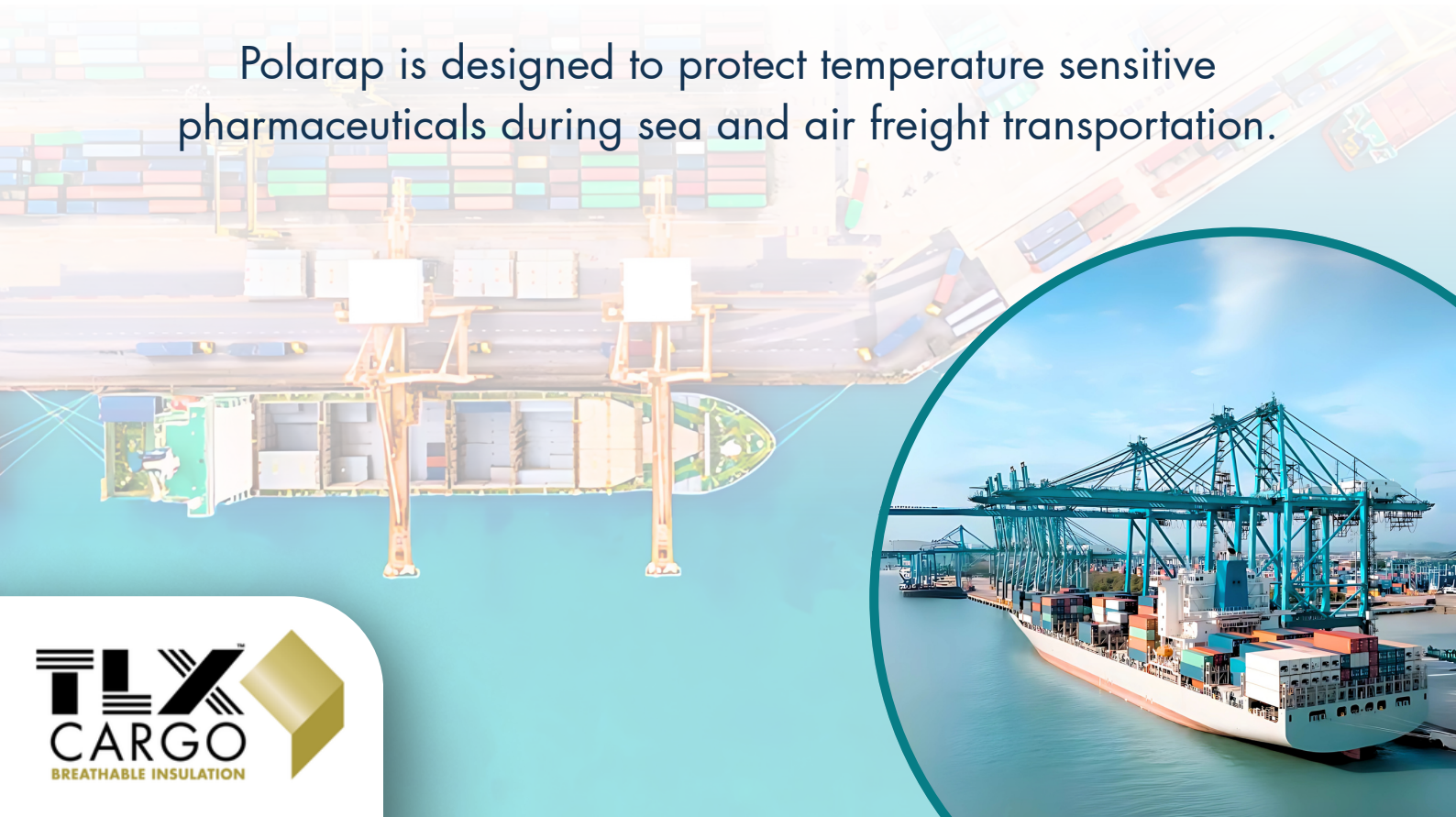


## Advanced PCM Protection

When shipping temperature-sensitive products, the unplug at port or the tarmac exposure time, are a weak spot in the supply chain.

Reducing cost whilst maintaining quality is critical, the challenge is often maintaining consistent temperatures during peak exposure time.

Polarap is designed to protect temperature sensitive pharmaceuticals during sea and air freight transportation.



## The Benefits of Polarap

- ✓ Stops temperature excursions for air and ocean shipments.
- ✓ 3mm thick, Full PCM coverage of the pallet.
- ✓ Condition in just 1-2 hours.
- ✓ Weight 12kg.
- ✓ PCM available in 2-8 and 15-25 ranges.

## The Key Features of Polarap

- ✓ 40 Polarap PCM systems per pallet for shipping
- ✓ Can be utilised in a large variety of applications.
- ✓ Incorporates Fibre-Flex technology.
- ✓ 3mm thick.

| PCM 2-8°C            | UNITS | DATA |
|----------------------|-------|------|
| Melting Temperature  | °C    | 6.5  |
| Freezing Temperature | °C    | 5    |
| Latent Heat, Melting | kJ/kg | 190  |

| PCM 15-25°C          | UNITS | DATA |
|----------------------|-------|------|
| Melting Temperature  | °C    | 21   |
| Freezing Temperature | °C    | 19   |
| Latent Heat, Melting | kJ/kg | 190  |

### What makes PCM so effective?

Phase Change Materials are ideal for thermal energy storage as they are highly cost effective, stable and environmentally friendly. PCMs are ideal for cold chain transportation/storage of temperature controlled packaging containing food and pharmaceuticals.

- Unique, non-leak PCM system.
- Strong, flexible, easy to handle even when frozen.
- Robust and waterproof.
- Ideal for pharmaceutical, chemical, perishable and healthcare shipments.