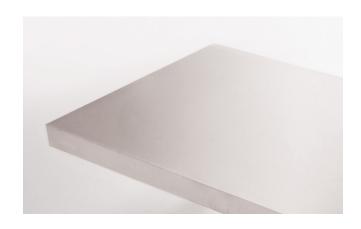


ThermaVIP+ reinforced vacuum insulation panels provide the ideal solution for Temperature Controlled Packaging (TCP). Modular, lightweight, compact and robust, ThermaVIP+ panels deliver highly efficient thermal control over extended transport time. Their slim format ensures high internal volume to maximize shipment cost-efficiency.

ThermaVIP+ panels are compliant to ISTA 7D & ASTM D3103, and validated for internal temperatures of 15-25 °C, 2-8 °C and -25--15 °C for various transit time periods, including 120+ hours. ThermaVIP+ products maintain performance over repeated use, thanks to a resilient, encapsulated construction.



ThermaVIP+ panels are ideal for re-usable cold-chain packaging for pharmaceutical products, perishable foods, industrial products, fine arts and more.



Thermal packaging



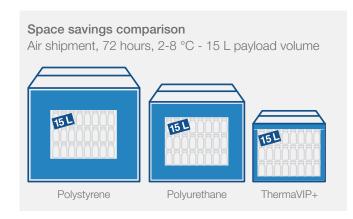
Long-term temperaturecontrolled shippers and containers

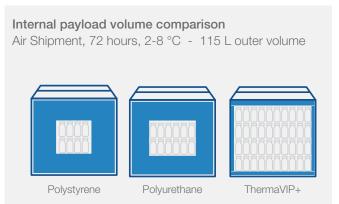


# General specification, typical values

ThermaVIP+

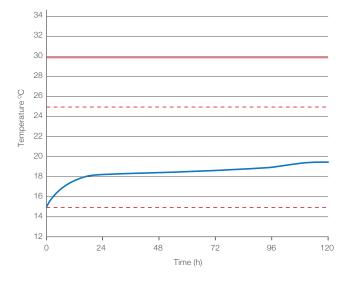
Value	ThermaVIP+ VIP Panel	Test Methods
Color	Silver	
Initial R value	≥8 [m²K/W] ≥45 [ft²°F h/BTU]	ASTM C518-10, Testing temperature: 22.5 °C
Initial thermal conductivity	≤0.0042 [W/mK]	ASTM C518-10, Testing temperature: 22.5 °C
Thickness	30 mm +/-10 %	
Temperature range during application	-80 °C to +100 °C	





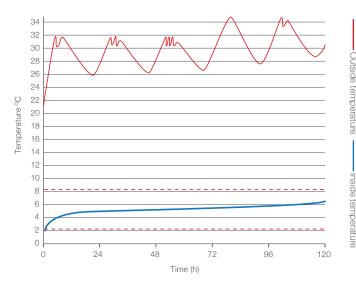
# Thermal insulation performance validation

Thermal performance of Thermavip+ box at controlled room temperature (15-25 °C)



External volume - 40.7 L, Internal volume - 22.6 L PCM quantity - 4 x1 L, Payload volume - 16.5 L

Thermal performance of Thermavip+ box at refrigereted temperature (2-8 °C)



External volume - 114.8 L, Internal volume - 76.4 L PCM quantity - 12 x1 L, Payload volume - 50 L



## Benefits of ThermaVIP+

# Space-saving high performance

Reduction of up to X7 in external volume compared to conventional insulation

#### Robust and reliable

Enhanced mechanical strength prevents vacuum loss caused by damage

#### Customizable

Diverse panel sizes and thicknesses

#### **Cost-effective**

Premium performance, competitively priced

#### Multi-use packaging

Sturdy, reusable, re-shippable TCP for closed-loop and open-loop shipping systems

#### Easy assembly

Simple, time-saving modular panel box construction

### Mechanical resilience

ThemaVIP+ reinforced panels comply with ASTM D3103, and ensure optimal performance throughout the rigors of transit, storage, and re-assembly.

Click here to watch the video



Use ThermaVIP+ panels to upgrade your existing cold-chain packaging, or develop with us customized solutions.

Contact: thermavip@eu.averydennison.com | thermavip.com

All information is believed to be reliable and accurate. However, the furnishing of such information and comparisons is for reference purposes only and does not constitute a warranty of any kind. Actual product performance should always be tested for fitness-for-use.

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