

**SOLVED
WITH
INTEGRITY & INSIGHT**

patheon

Reusable shipper program

Cold chain product integrity across the entire supply chain demands rigorous processes & cold chain expertise of the highest caliber.

Thermo Fisher Scientific recognizes the challenges and complexities in managing controlled temperature shipments. Today's shipment value is becoming increasingly expensive and, in the worst case, shipments with temperature excursions can lead to a patient dropping out of a trial. To mitigate that risk, Thermo Fisher offers a reusable shipper program that brings multiple benefits for all stakeholders and further increases the quality across the supply chain.

What is a reusable shipper?

Our program uses Phase Change Materials (PCM) shippers. Phase Change Materials (PCM) function by storing and releasing energy to reduce temperature fluctuations. While this technology is more costly when compared to traditional water-based coolants, it provides superior performance, and it can be tailored to specific shipping temperatures. A key advantage of this technology is that when placed into a storage area that is controlled at the required temperature, the shipper 'hibernates' extending the overall hold time. Supported temperature profiles include +15°C to +25°C, +2°C to +8°C, sub -20°C and sub -40°C.

AVAILABLE PAYLOADS	
Liters	Dimensions (inches)
4	5.9" x 5.9" x 5.9"
12	8.9" x 8.9" x 8.9"
16	10" x 10" x 10"
28	12" x 12" x 12"
56	15" x 15" x 15"

Quality promise — as good as a new one!

Each shipper is 100% visually inspected and damaged components get replaced. Components are cleaned and decontaminated before reuse. Life cycle management ensures consistent quality

- **Prevention and reduction of temperature excursions that occur during shipment.** Reusable shippers maintain controlled temperature, on average, twice as long as a water based single use shipper
- **Improved site satisfaction.** Smaller external dimensions for handling and storage, lower dead weight and eliminated site waste storage and disposal costs increase site satisfaction
- **Reduced solid waste going to land fill.** For every 1,000 shipments approximately 18 tons / 40,000 pounds of solid waste are avoided.

The clinical site and Sponsor's feedback on our reusable shipper program are consistently positive. Key KPI's include that we have achieved a return success rate above 97% (globally), and a 77% reduction in temperature excursions compared to water-based coolant shippers. In 2019 we project to have over 80,000 shipments with reusable shippers and a 260% growth rate year over year.

TOP STATISTICS

>77%
Reduction in temperature excursions

99.9%
Arrive without temperature excursion

97%
Return success overall

Zero temperature excursion mindset

Our integrated processes and comprehensive end-to-end cold chain management service from employees with an outstanding zero temperature excursion mindset mitigates the risk of temperature excursion. One element of our Zero Temperature Excursion Mindset program is our reusable shipper service offering that includes:

- **Unchanged workload and processes for sponsor.**
The reuse process is fully monitored and managed by our Total Transportation Management team
- **No investment and advantageous return costs.**
Reusable is a pay-per-use program and return costs and refurbishment fees are included in the pay-per-use price

Our expertise

Powered by people with a zero temperature excursions mindset and an exceptional commitment to providing best-in-class cold chain services, Thermo Fisher Scientific is the global standard for quality and assurance. Along with proficient monitoring and tracking resources we optimize every level of the cold chain process to ensure the security of your clinical trial.

Shipper return and reuse program in 13 countries across 5 continents

