



## Series 4-272

## User Guide



Tested To Extremes



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# SPECIFICATION SHEET

## Series 4-272



### Product Overview

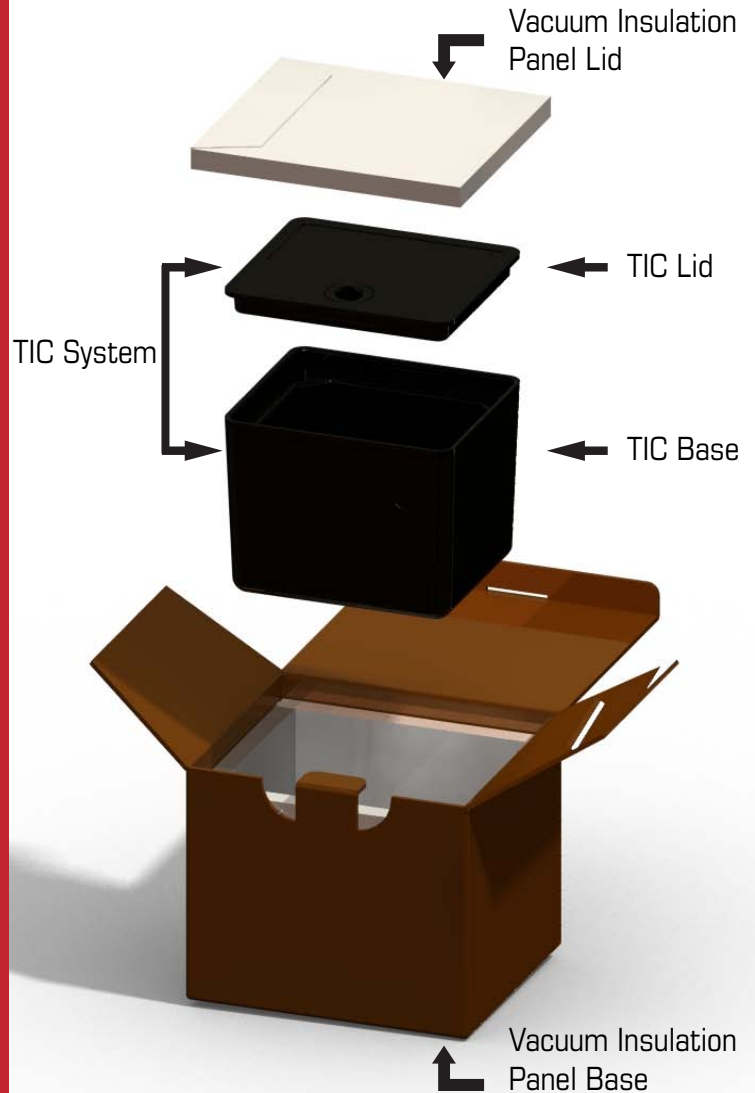
72-hour thermal protection in a small-sized shipping container.

Validated to hold chilled medical materials at a safe temperature for 72 hours for safety-assured transport in the 1° to 10°C and 2° to 8°C range. Removable TIC® System with integrated 4°C PCM is preconditioned in a -18°C or colder freezer for most shipping situations.

### Specifications

Temperature Range	Within 1° - 10°C
Payload Capacity (Liters/Cubic Inches)	2/127.5
Payload Area Dimensions (LxWxH)	6"x5"x4.25"
Exterior Dimensions (LxWxH)	10.5"x9.5"x9"
Tare Weight	10 LBS
Thermal Performance (ISTA Summer Profile)	72+ Hrs
Insulator	Vacuum Insulation Panels

### Product Components

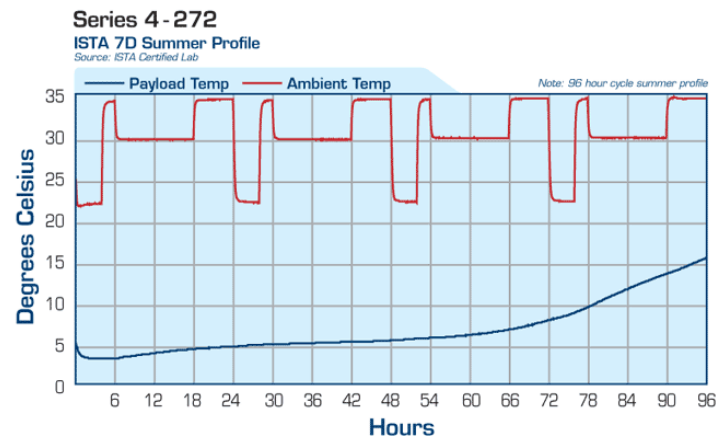


### Ensuring Consistent Performance

Exterior Ambient Conditions	Holds Payload 1° - 10°C
ISTA 7D summer shipping profile	72+ Hours
ISTA 7D winter shipping profile	120+ Hours
*Performance based on full payload preconditioned at 4°C	

- Always precondition TIC System before use according to instructions on TIC lid.
- Ensure all components are clean and not damaged.
- Follow assembly instructions printed on outside corrugate box.
- After loading, avoid opening container unnecessarily.
- Ensure both TIC lid and VIP lid are secure before sealing for transport.

### ISTA Thermal Performance



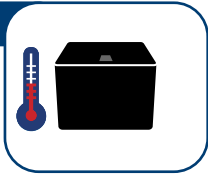
ISTA Profile: ISTA (International Safe Transit Association) provides performance testing standards, training and education. The ISTA 7D shipping profiles simulate typical temperature ranges for summer (22° to 35° C) and winter (-10° to 18° C) conditions. For more information, visit [www.ista.org](http://www.ista.org).

# USING YOUR CREDO THERMAL PACKAGING SOLUTION

## Series 4-272



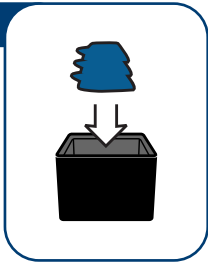
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### Precondition TIC® System

- Remove TIC (Thermal Isolation Chamber) System (lid and base) from VIP (Vacuum Insulation Panel) base by pulling open tab on front of corrugated box and removing silver VIP lid.
- Place TIC System in a -18°C freezer (or colder) for a minimum of 8 hours, until frozen hard. Separate TIC lid from TIC base during preconditioning. Before adding product payload, let stand at room temperature for 25 minutes or until surface frost melts.
- **Optional Storage Method:** After TIC System preconditioning, it may be refrigerated to be ready for immediate use. The TIC System may be refrigerated up to 48 hours before needing to be reconditioned. Verify refrigerator is set at 4°C or below.
- **TO PRECONDITION IN EXTREME COLD CONDITIONS:** Place the TIC System in a 4°C refrigerator for a minimum of 4 hours. Verify that the PCM is liquid by shaking.

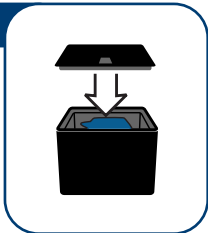
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### Load Payload

- Ensure payload (product to be shipped) is preconditioned at 4°C before loading into TIC base. Do not overpack.
- Add non-insulating filler to fill empty payload space to prevent contents from shifting during transit.

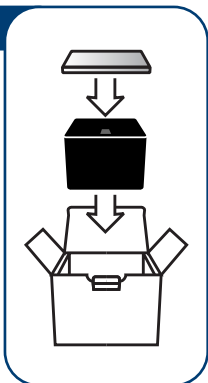
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### Secure TIC System

- Place TIC lid over payload area, ensure lid lies flat without forcing onto TIC base.

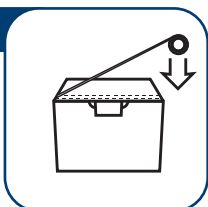
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### Assemble Credo Container

- Lower TIC System into VIP base and place VIP lid over TIC. Without forcing, make sure lid lies flat and level.

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### Close and Secure Container

- Close and secure box with packing tape where indicated.



### How to Clean Credo Components:

- TIC® System (lid and base): The TIC lid and base can be cleaned using warm water and soap or alcohol. Sterilization can be performed using alcohol or other salt-based disinfectants.
- VIP lid and base: VIP lid and base can be cleaned using a damp rag with soap or a rag with alcohol.
- DO NOT:
  1. Autoclave any of the components.
  2. Use any volatile organic compounds such as acetone or methyl ethyl ketone on any of the components.
  3. Expose any of the TIC components or VIPs to extreme heat (+75° C or above).
  4. Use any abrasive cleaners on any of the components.

### How to Validate Thermal Compliance:

Minnesota Thermal Science offers certified PC based temperature data loggers that fit inside the container and provide accurate, continuous time and temperature data in Excel format. Reference our white paper “Best Practices for Validating Thermal Performance” to validate or compare the performance of any packaging solution.

### Where to Find Transportation Validation Information:

This container has been ISTA transportation certified. A validation statement can be found on the bottom of the outer corrugated box.

### How to Verify Components are Working Properly:

Any packaging solution should be periodically checked to ensure all components are working properly. Reference our white paper “Best Practices for Validating Thermal Performance” to validate or compare the performance of any packaging solution.

### How to Inspect and Replace Vacuum Insulation Panels: (VIPs)

The Vacuum Insulation Panels (VIPs) in Credo containers are extremely effective as long as they hold an interior vacuum. Inspect VIP lid and VIP base surfaces to ensure they are gripped tight. Another indicator of a compromised panel is a loss of rigidity. A loose skin or non-rigid panel indicates vacuum loss and the product should be returned for refurbishment. Avoid removing VIP base from outer corrugated box unless corrugated or VIP is damaged and needs to be replaced. The VIP lid and VIP base will expire and should be replaced before the expiration date printed on each panel.

Call 1-877-537-9800 if a component needs refurbishment.