



Series 4-EMT

User Guide



Tested To Extremes



Minnesota Thermal Science

3020 Niagara Lane

Plymouth, MN 55447

Made in the U.S.A.

www.credothermal.com

Tel: (877) 537-9800

Fax: (763) 412-4801

SPECIFICATION SHEET

Series 4-EMT



Product Overview

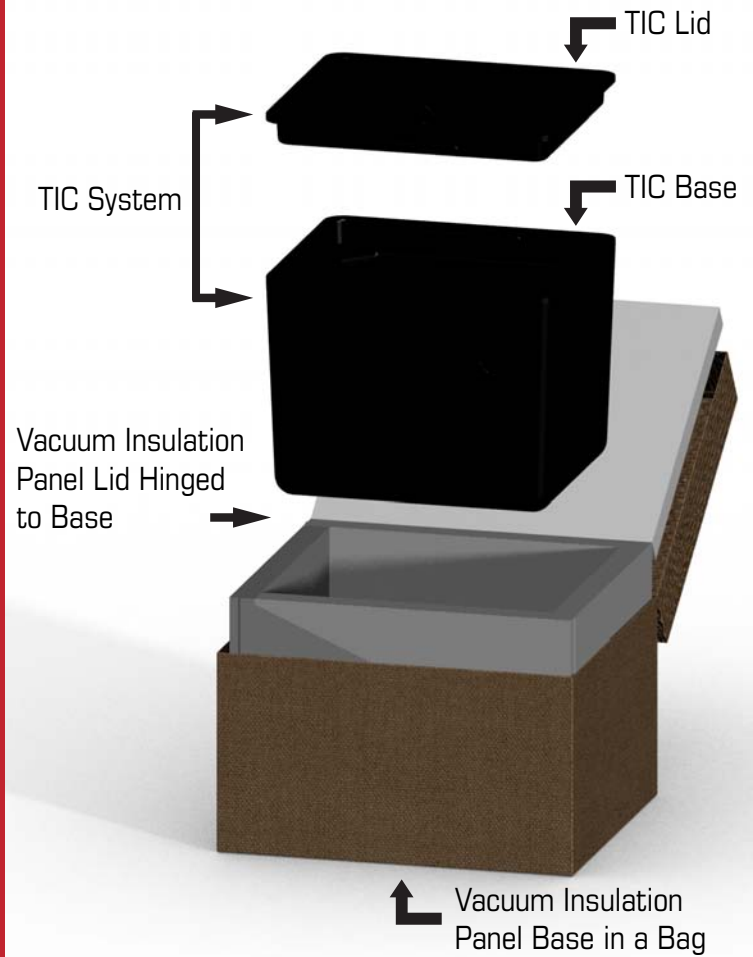
Lightweight pack designed for use by emergency medical technicians.

Holds blood and other chilled medical supplies for 24+ hours even in harsh ambient conditions. Reusable, iceless medical container has removable two liter TIC® Insert that is preconditioned in a standard freezer.

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)	9.25"x8.25"x8"
Tare Weight	7 LBS
Thermal Performance (ISTA Summer Profile)	48+ Hrs
Insulator	Vacuum Insulation Panels

Product Components

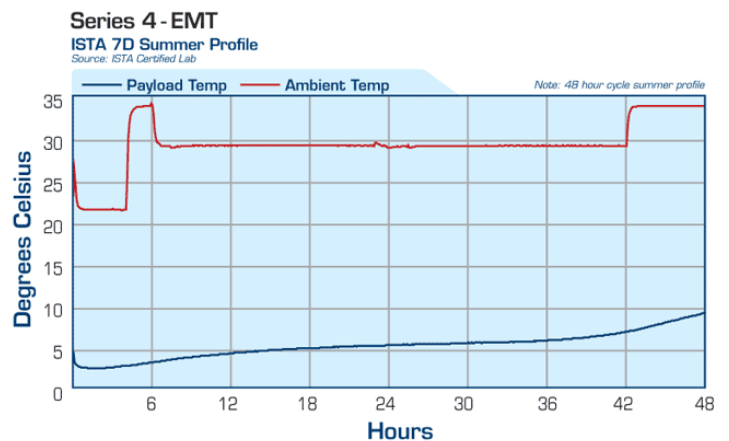


Ensuring Consistent Performance

Exterior Ambient Conditions	Holds Payload 1° - 10°C
ISTA 7D summer shipping profile	48+ 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.
- After loading, avoid opening container unnecessarily.
- Ensure that the bag has not been torn or damaged during use.
- Ensure both TIC lid and VIP lid are secure before sealing for transport.

ISTA Thermal Performance



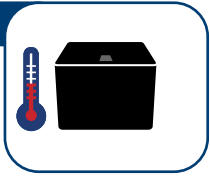
ISTA Profile: ISTA (International Safe Transit Association) provides performance testing standards, training and education. The ISTA 7D shipping profiles simulate typical temperature ranges for summer (22° to 35° C) and winter (-10° to 18° C) conditions. For more information, visit www.ista.org.

USING YOUR CREDO THERMAL PACKAGING SOLUTION

Series 4-EMT



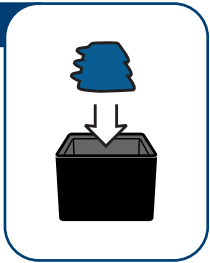
1



Precondition TIC® System

- Remove TIC (Thermal Isolation Chamber) System (lid and base) from VIP (Vacuum Insulation Panel) base by unzipping the bag, unstrap the velcro and flip open the 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° to 8°C refrigerator for 4 to 8 hours. Verify that the PCM is liquid by shaking.

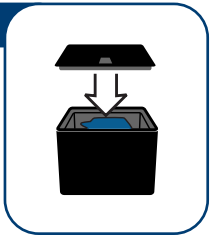
2



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.

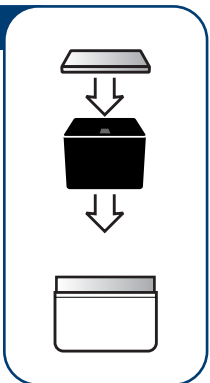
3



Secure TIC System

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

4



Assemble Credo Container

- Lower TIC System into VIP base and secure hinged VIP lid over TIC with bag mounted Velcro straps, making sure lid lies flat and level. For best performance ensure the bag mounted Velcro straps are secured tight over the VIP lid. Failure to do this will significantly reduce the products ability to perform as specified.

5



Close and Zip Shut

- Pull bag top flap over the VIP assembly and zip both zippers until they meet.



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.

How to Inspect the Outer Bag:

The outer bag of the Series 4-EMT should be free of rips and defects throughout. Replace the bag if a tear occurs, or the zipper fails as this can affect the performance of the container.

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 bag unless the bag 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.