Crēdo®
THERMAL PACKAGING SOLUTIONS

Series 20M-28168 User Guide

PROVEN. PRECISE. RELIABLE

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Made in the U.S.A.
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rev.A

SPECIFICATION SHEET
Series 20M-28168

Product Overview

Superior thermal protection in a convenient mid-size container.

Qualified to hold chilled medical materials at a safe temperature for up to seven days – ideal for long-duration international transport of pharmaceuticals, blood, biologics and tissues where customs delays are a real risk.

Modular TIC® System panels with integrated -20°C phase-change material break down easily for simple storage and preconditioning.

Specifications

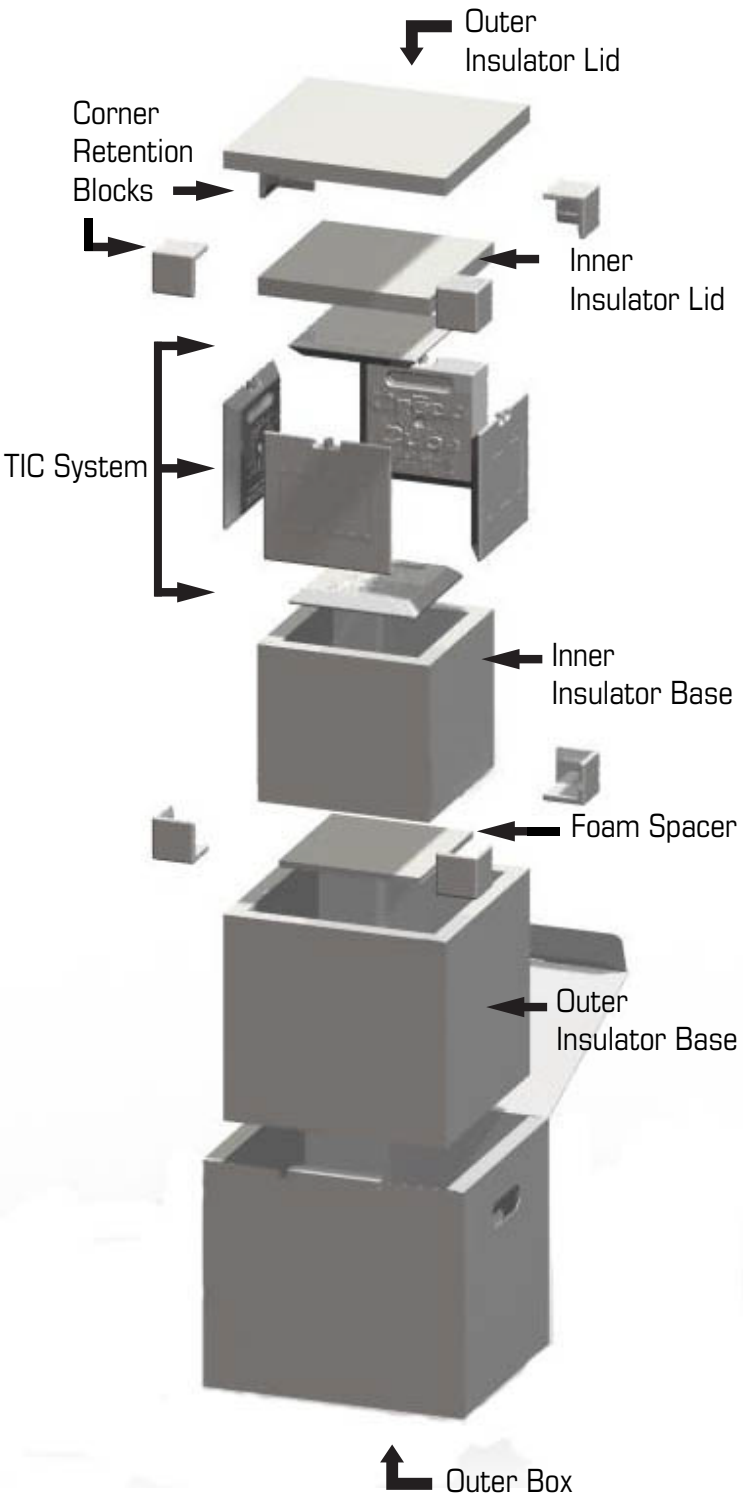
Unit of Measure	Standard	Metric
Temperature Range	- 4°F or Colder	-18°C or Colder
Payload Capacity	1728 in³	28316 cm³
Volumetric Capacity	7.5 Gallons	28 Liters
Payload Dimensions (L x W x H)	Inches	Centimeters
	12 x 12 x 12	30 x 30 x 30
Exterior Dimensions (L x W x H)	Inches	Centimeters
	21 x 19.5 x 19.75	53 x 50 x 50
Tare Weight	59 LBS	27 kg
Thermal Performance (ISTA Profile)	Winter Profile	Summer Profile
	120+ Hours	168+ Hours
Insulator	Dual Vacuum Insulation Panels	

Ensuring Consistent Performance

Exterior Ambient Conditions	Holds Payload Under -18°C
ISTA 7D summer shipping profile	168+ Hours
ISTA 7D winter shipping profile	120+ Hours
*Performance based on full payload preconditioned at -65°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 lids are secure before sealing for transport.

Product Components



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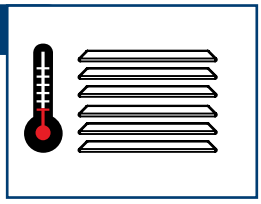
USING YOUR CREDO THERMAL PACKAGING SOLUTION
Series 20M-28168

1



Precondition TIC® System

- Remove TIC (Thermal Isolation Chamber) System (6 panels) from the inner insulator base by pulling open the tab on the front of the corrugate box and removing the outer insulator lid to expose the inner insulator assembly.
- Remove the four white corner retention blocks along with the inner insulator lid. Remove the 6 panels from the inner insulator base.
- Place the TIC System in a -65ºC freezer (or colder) for a minimum of 24 hours, until the Phase Change Material (PCM) is frozen hard. Ensure the TIC components lay flat.

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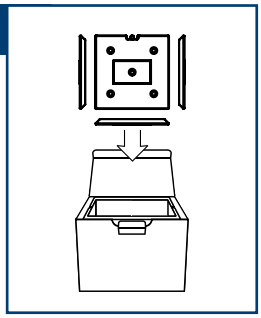

Assemble TIC Base

- Insert a TIC panel into the base of the inner insulator with the Credo Cube embossed logo facing up.
- Add 4 TIC panels to form the side walls with the Credo Cube embossed logo facing inward.

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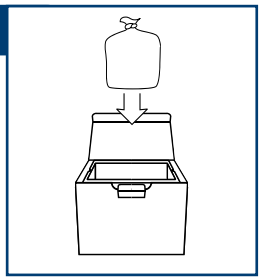

Load Payload

- Ensure payload (product to be shipped) is preconditioned at -20ºC (or colder) before loading into the 5 TIC panel assembly listed above. Do not overpack.
- Add non-insulating filler to fill empty payload space to prevent contents from shifting during transit.

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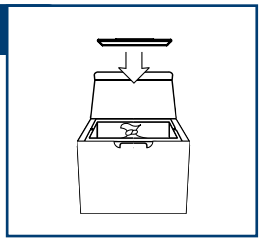

Insert TIC Lid

- Place the final TIC panel over payload area, ensuring the panel lies flat and level without forcing onto TIC side walls.

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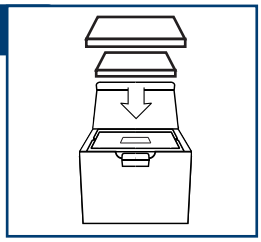

Insert Insulator Lids

- Place inner insulator lid onto inner insulator base making sure it rests flat and level without forcing.
- Install the four white corner retention blocks ensuring the cube logo is facing upwards. Ensure that all four blocks do not protrude above the outer insulator base assembly.
- Place outer insulator lid onto outer insulator base making sure it rests flat and level without forcing.

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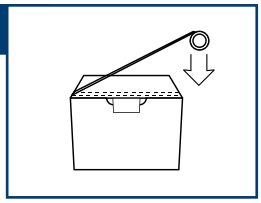

Close and Secure Container

- Close and secure box with packing tape where indicated.

CARING FOR YOUR CREDO THERMAL PACKAGING SOLUTION
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How to Clean Credo Components

- TIC® System (6 panels): The TIC panels can be cleaned using warm water and soap or alcohol. Sanitization can be performed using isopropyl alcohol and water mixture (typically 70/30 mix alcohol to water) or other salt-based disinfectants.
- Insulator lid and base: Insulator lid and base can be cleaned using a damp rag with soap or a rag with isopropyl alcohol.
- DO NOT:
  1. Autoclave any of the components.
  2. Use any organic solvents such as acetone or methyl ethyl ketone (MEK) on any of the components.
  3. Expose any of the TIC components or insulator to extreme heat (+75° C or above).
  4. Use any abrasive cleaners on any of the components.
- Contact Minnesota Thermal Science for verification if your preferred method is not listed.

Notes on TIC® Preconditioning

- Proper TIC preconditioning is vital for the containers correct operation. Follow the tips below to ensure proper operation.
  1. Follow Preconditioning instructions on the TIC label.
  2. Make sure the components are frozen flat.
  3. Shake the panels after freezing to ensure they are frozen solid and no liquid can be heard.
  4. If you do not have the ability to utilize a -65° C freezer, a freezer as warm as -25° C can be utilized with a longer conditioning time.
  5. A standard -20° C freezer WILL NOT be cold enough to properly condition the TIC set.

How to Perform a Thermal and/or Transit Qualification

Minnesota Thermal Science offers thermal and transit qualification services via our ISTA certified laboratory. If you do not wish to utilize our services we offer NIST traceable PC based temperature data loggers that fit inside the container and provide accurate, continuous time and temperature data in excel format. We recommend that you reference and follow ISTA procedure 5B or ISTA procedure 7D which are ASTM D3103 compliant to guide you through your thermal testing process. We recommend that you reference and follow ISTA procedure series 1, 2 or 3, or ASTM D4169 to guide you through your transit testing. Many of our units are already transit tested to ISTA procedure 3A. The certification can be found on the bottom of the box.

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.

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