**Cool Cube™ Series 4 PCM Panels**  
Refrigerated Temps for vaccine, blood, medicine & more.

**Prep Method C:** Freezer/Room Prep to keep product cold

**Panel Prep Stages**

1. **Store panels in a freezer** so PCM (phase change material inside the panel) is solid (i.e. 2 hrs. @ -15°C). Shake to verify.

2. **Transfer panels into a room temperature environment just prior to use** (recommended times below) to allow PCM inside to rise to the appropriate operating temperature.

   **Recommended times based on a 22°C room temperature (by panel size):**
   - 6 x 6 = 25 minutes
   - 6.5 x 6.5 = 30 minutes
   - 12 x 12 = 35 minutes
   - 18 x 18 = 40 minutes
   - 6.5 x 11 = 30 minutes

   *PCM panels coming out of a freezer into a room temperature environment may develop frost and/or condensate on the outside. After the frost turns to condensate, it is above 0°C. As soon as any liquid is heard inside the panel, it is at or above 4.5°C.*

**DO NOT assemble panels directly from a freezer, as they may be initially below 0°C.**

**ISTA 7D Thermal Performance Study**

**Temperature Hold Times**

<table>
<thead>
<tr>
<th>PCM Panel Type</th>
<th>Refrigerated Temps</th>
<th>2-8°C</th>
<th>1-6°C</th>
<th>1-10°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cool Cube™ 03</td>
<td>Series 4</td>
<td>65 hrs</td>
<td>39 hrs</td>
<td>70 hrs</td>
</tr>
<tr>
<td>Cool Cube™ 08</td>
<td>Blue Tab/Label</td>
<td>76 hrs</td>
<td>53 hrs</td>
<td>83 hrs</td>
</tr>
<tr>
<td>Cool Cube™ 28</td>
<td>(6-panel pack-out)</td>
<td>103 hrs</td>
<td>68 hrs</td>
<td>108 hrs</td>
</tr>
<tr>
<td>Cool Cube™ 96</td>
<td></td>
<td>126 hrs</td>
<td>112 hrs</td>
<td>128 hrs</td>
</tr>
</tbody>
</table>

**Times listed are based on lab-validated, ISTA 7D summer (hot conditions) and winter (cold conditions) 24-hour cycled shipping profiles without the additional thermal mass of a payload. Actual performance times may vary.**

For Technical Support Call (866) 469-6019
Always prep the PCM panels before use according to one of the described methods provided by VeriCor.

Ensure all components are clean and free of damage.

During prep, enable ample air flow around all panel sides.
  - Use spacers (pencils) or racks...customer solution→

Lay panels flat when “freezing”.

Freeze/melting times vary depending on number of panels being prepped and equipment specifications being used.

Assemble using all six panels for maximum hold time.
  - Using less panels does not change the holding temperature but does decrease hold time.

Panels are reusable (10,000+ cycles)
  - End-of-life disposal: Panels use a plastic #2, typically recycled by businesses/communities. PCM is nontoxic and readily biodegradable.

Use a calibrated data logger or other temperature monitoring device to observe internal temperature.

Avoid unnecessary opening of the Cool Cube™ after loading payload. Opening of the Cool Cube™ will decrease hold time.

An infrared temperature thermometer can assist in ensuring the panels reach a safe pack-out temperature (good for finding out the approximate temperature of each panel).

The farther the ambient temperatures are from the melting point, the quicker PCM will change states (solidify/liquefy).