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

**Prep Method B**: Fridge ONLY Prep to keep product cold

1. **Store panels in a refrigerator for a minimum of 24 hours before use.** Shake to check the state of PCM (phase change material inside the panel).
   - If *liquid*...panel is at the fridge temp but above 5°C; anticipate shorter hold times.
   - If *solid*...panel is at the fridge temp but below 4°C; ideal for maximum hold times.
   - If *solid/liquid combination*...panel is at the fridge temp of 4-5°C; monitor time/temp.

   In a refrigerator that maintains 4°C or below, PCM will be solid (ideal for keeping product cold in warm/hot conditions). In a refrigerator that maintains 5°C or above, PCM will be liquid. Although panels are liquid, the PCM inside is at the temperature of storage environment after 3 hours (i.e. stored in a 6°C fridge, the PCM panels are at 6°C). Assembling the Cool Cube™ with liquid panels (additional thermal mass) will help keep product at their temperature, just for a shorter amount of time. Monitor Cool Cube™ temperature closely.

**Panel Prep**

This prep is for when the Cool Cube™ will be used for **shorter durations**.

**ISTA 7D Thermal Performance Study**

<table>
<thead>
<tr>
<th></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).