

## Attention: TSA or Travel/Border Security

The Cool Cube<sup>™</sup> is a high-performance cooler that keeps medical products within the desired temperature range for an extended time. The carrier of this Cool Cube<sup>™</sup> may be traveling with *or will need to travel with* medically necessary medication kept within a specific temperature parameter.

Cool Cube<sup>TM</sup> coolers come in various sizes, but the basic principles remain the same. Please refer to this cutaway diagram of a Cool Cube<sup>TM</sup>.  $\rightarrow$ 

The outer bag/case is probably of no concern. Smaller versions are made of fabric with a couple of zippers, pockets, and straps, while the larger models are plastic with integrated wheels for easy transport.



The insulation is six separate vacuum insulation panels taped together. The construction of each panel has an enveloping skin made of plastic foil (coated with aluminum) that encloses the fill material in a vacuum. The fill material is porous powder fibers that resist pressure when air is removed. The hermetically weld-sealed ends protrude on each side and are folded back and taped to the panel, while a clear plastic encompasses the panel for additional damage protection. The replacement cost of the insulation starts at \$290 (depending on size).

The temperature regulating panels that are removable (white and 1" thick) are, in essence, thin bottles with beveled edges that contain a liquid/solid inside. The label on the outside is grey and labeled "Lab Freezer" (or "Series 20M" on previous models). These passive cooling panels of the Cool Cube<sup>TM</sup> have a phase change material (PCM) sealed inside. And although water is a PCM (it turns to ice at  $0^{\circ}C/32^{\circ}F$ ), these panels *do not* contain water. Instead, they are filled with a nontoxic (certified by the U.S. Food and Drug Administration as a food-grade chemical), biodegradable, hydrogenated compound that turns solid at -21.5°C/-6.7°F. Depending on use, the PCM inside may be liquid, solid, or a combination. But regardless of the consistency, the PCM inside is vital for maintaining the temperature of the Cool Cube<sup>TM</sup>. The replacement cost of a single panel starts at \$50 (depending on size).

Although manufacturer documentation like this is rarely required, this document should serve as a source in those instances where questions may arise. If you have any questions regarding this document, please feel free to call us at (608) 526-6901.

Sincerely.

Luther Olson Director of Marketing