Attention: TSA or Travel/Border Security

The Cool Cube™ is a high-performance cooler that keeps medical products within a desired temperature range for an extended period of time. The owner of this Cool Cube™ may be currently traveling with, or will need to travel with, medically necessary medication kept within a certain temperature parameter.

Cool Cube™ coolers come in various sizes, but the basic principles remain the same. Here is a cutaway diagram of a Cool Cube™:

The outer bag/case is probably of no concern. It is fabric with a couple zippers, pockets and straps.

The insulation is six separate vacuum insulation panels that are taped together. Each panel is constructed as follows: an enveloping skin made of plastic foil (coated with aluminum) encloses the fill material in a vacuum; the fill material takes the form of powder fibers and is porous but resists pressure (air can be evacuated); the hermetically weld-sealed ends protrude on each side and are folded back and taped to the panel; a clear plastic encompasses the panel for additional damage protection. The replacement cost of the insulation starts at $290 (depending on size).

The temperature regulation panels are the 1” thick plastic panels that are white (labeled “Series 4”), have a beveled edge and contain a liquid/solid inside. These passive cooling mechanisms of the Cool Cube™ have what is called a phase change material (PCM) sealed inside. And although water is a PCM (it turns to ice at 0°C/32°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 4.5°C/40.1°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™. 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 the Cool Cube™ or its components, please feel free to call us at 1-866-469-6019.

Sincerely,

Luther Olson
Director of Marketing