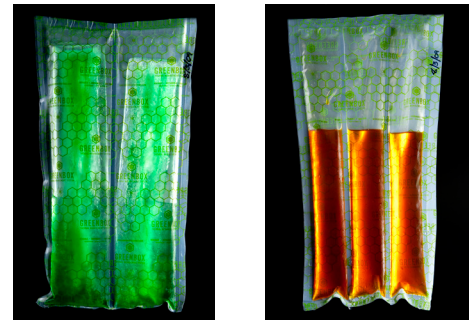


# What's different about Cardinal Health cold chain totes

A comparison to traditional gel-packs

**Why did Cardinal Health change from traditional water-based gel-packs to phase change panels?**

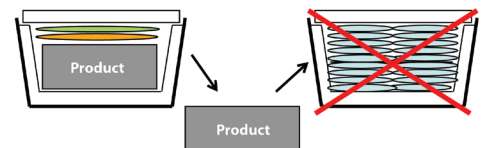
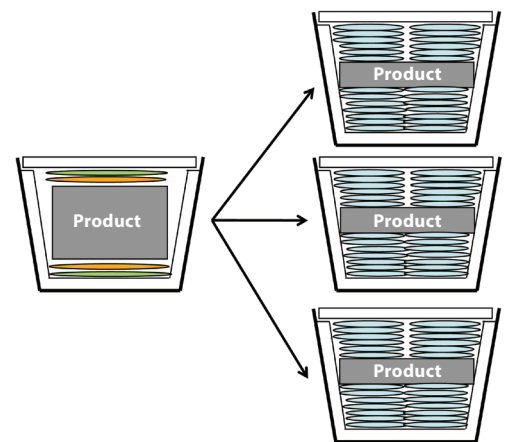
Our objective is **to improve the supply chain integrity of our refrigerated packaging** by providing your shipments in qualified packaging for all seasons and sizes that will maintain the labeled storage temperature until delivery at your location.



**Couldn't this be done using traditional frozen water-based gel-packs?**

Yes, but it would require as many as 27 8-oz gel-packs in a large tote or insulated containers would have to be arranged differently depending upon the external temperature. This method would drastically increase the amount of packing material, which would take up more space in your pharmacy, add more work to the unpacking process and increase the amount of wasted material.

Maintaining the use of totes with insulated liners and the phase change materials maintains ease-of-use and functionality in a limited space. This also ensures your product reaches you within the labeled temperature range regardless of whether or not your tote is full of product or contains only one item, or whether it is shipped in the hottest or coldest environments and seasons.



Unable to qualify small tote with water-based gel packs

[cardinalhealth.com](http://cardinalhealth.com)

Cardinal Health  
7000 Cardinal Place  
Dublin, Ohio 43017