TCIP manufactures PCMs for:

Refrigerated Transport (0 centigrade)
Frozen transport (-7 or -16 centigrade)
Ultra-Cold Transport (-21 centigrade).

All of our PCMs are Non-Hazardous, Non-Toxic, Reusable with a Multi-Year Shelf Life. Our PCMs end the need for dry ice, ice or gel packs that do not maintain desired temperature and are poorly made. The PCM is put in an almost indestructible hard outer shell specifically engineered to fit our Tote units. Any of our Tote units can be fitted with either a refrigerated, frozen or ultra-cold PCM unit depending on need.





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SPECIMEN TRANSPORT TOTES

3 SIZES TO CHOOSE FROM



MPN KSTHSCG

SMALL TOTE

DIMENSIONS

Exterior: 14.4"L x 10"W x 14"D **Interior:** 10.5"L x 6.3"W x 10.8"D

Interior Bottom: 10.3"L×6.1"W

Weight: 4.3 lbs

USES 3 lbs HARD SHELL PCMs available with:

Refrigerated PC0 MPN. TCIP HS PCM 0 3# Frozen PC-7 MPN. TCIP HS PCM -7 3# Frozen PC-16 MPN. TCIP HS PCM -16 3# Ultra Cold PC-21 MPN. TCIP HS PCM -21 3#

→ Document window on front and back → ID window on each side → Shoulder Straps

MEDIUM TOTE

DIMENSIONS

Exterior: 15.5"L x 14.4"W x 16.9"D **Interior:** 10.5"L x 9.3"W x 12.1"D

Interior Bottom: 10.4"L \times 9"W

Weight: 5.3 lbs

USES 3 lbs HARD SHELL PCMs available with:

Refrigerated PCO MPN. TCIP HS PCM 0 3# Frozen PC-7 MPN. TCIP HS PCM -7 3# Frozen PC-16 MPN. TCIP HS PCM -16 3# Ultra-Cold PC-21 MPN. TCIP HS PCM -21 3#

→ ID window on each side



MPN KSTHLCGN



MPN KSTHLCGN

LARGE TOTE

DIMENSIONS

Exterior: 22.6"L x 13"W x 14"D **Interior:** 19.8"L x 10.2"W x 11.5"D

Interior Bottom: 18.4"L x 8.8"W

Weight: 8 lbs

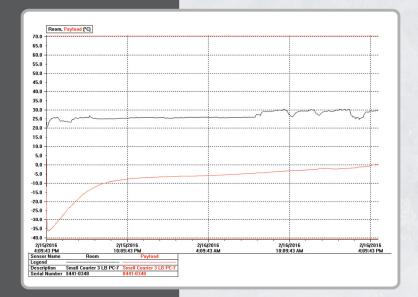
USES 4 lbs HARD SHELL PCMs available with: Refrigerated PCO MPN. TCIP HS PCM 0 4#

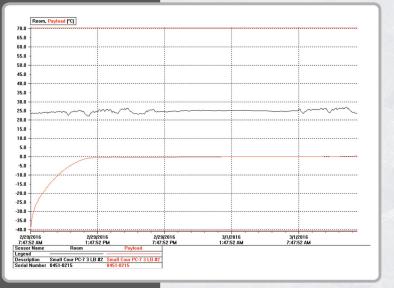
Frozen PC-7 MPN. TCIP HS PCM -7 4# Frozen PC-16 MPN. TCIP HS PCM -16 4# Ultra-Cold PC-21 MPN. TCIP HS PCM -21 4#

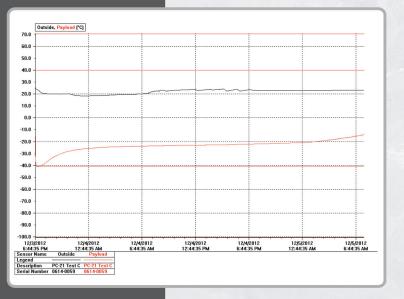
The large Tote uses two of our 4# hard shells, one above and one belove the payload

→ Document window on top and back → ID window on each side

→ Removable partition allows for two temperature zones







FROZEN [PC-7]

Small Tote was tested with our custom 3 pounds of TCIP PC-7 (-7 centigrade PCM) and remained frozen for over 26 hours (below 0 centigrade).

The red line indicates the payload area and the black line represents environmental temperature.

REFRIGERATED [PC-0]

Our Large Tote was tested with 5 pounds of PC0 (0 centigrade PCM) and remained refrigerated for over 26 hours (below 7 centigrade).

The red line indicates the payload area and the black line represents environmental temperature.

ULTRA-COLD ALLOGRAFT TOTE [PC-21]

Hospitals maintain allografts in ultra-cold refrigerators between -80 C to -40 C as this qualifies for a shelf life of up to 5 years. In accordance with the American Association of Tissue Banks (AATB) standards, those allografts can be stored above -40 C and below -20 C for 72 hours and be returned to long-term storage.

Many facilities use dry ice to transport the allografts from storage to the surgical suite. Dry ice must be purchased, is classified as dangerous, and cannot be stored, as it will go back to the gaseous state quickly.

TCIP has been using an ultra cold -21 Centigrade Phase Change Material (PC-21) to maintain allograft for the United States Military and civilian hospitals for transport to the surgical suite. The PC-21 is a nontoxic reusable Phase Change Material (PCM) capable of being stored for years without losing efficacy. A graph of those results from our hospital are below. In summary the allograft payload was maintained below -21 C in our tote for 29 hours.

The red line indicates the payload area and the black line represents environmental temperature.

