

HCC Holdings, Inc.

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CRYO-TEK™ 100 Anti-Freeze for Heating and Cooling Systems

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A blend of virgin (not recycled) propylene glycol and high purity Triple Protection additives, formulated for use in closed loop hydronic heating and cooling systems. **Cryo-Tek** can also be used in radiant tube heating systems, most solar heating systems and geothermal loops. Hercules' exclusive Triple Protection formula stabilizes pH to prevent acid corrosion, chelates hard water minerals and inhibits the formation of scale and sediment. These components work together to keep the system clean and operating efficiently by eliminating system deposits, improving heat transfer and minimizing wear to moving parts and seals. **Cryo-Tek** is compatible with PEX and elastomeric radiant tubing, commonly used materials for seals and bushings and provides corrosion protection for cast iron, steel, copper, brass and solder. **Cryo-Tek** has not been tested for use in systems containing CPVC plastic. Standard **Cryo-Tek** products should not be used in systems containing aluminum. **Cryo-Tek -100/AL** is available for aluminum systems. **Cryo-Tek** should not be used in systems with galvanized piping as the zinc coating will be dissolved. **Cryo-Tek** is a 94-98% efficient heat transfer solution in most application dilutions. It has a lower freeze point and higher boiling point than water and is non-flammable, odorless, non-toxic, nonirritating and compatible with Hercules boiler stop leaks and heating system cleaner products.

Cryo-Tek -100: Contains virgin (not recycled) propylene glycol with Triple Protection corrosion inhibitor, pre-mixed ready to use formulation. Certified Performance: Freeze Protection Down to -70°F / -57°C, Pumpable Down to -80°F / -62°C, and Burst Protection Down to -100°F / -73°C. Cryo-tek -100 can be diluted with water for less severe conditions. (see Table II)



- * Please check with equipment manufacturer of system to determine compatibility with this product.
- **Minimum flow protection levels are estimated and are dependent on system and equipment.

Test Kits and Accessories

Freeze protection levels and corrosion protection levels should be checked annually. Use **Hercules Refractometer** (35290) and **pH Meter** (35272). Add additional **Cryo-Tek** product if freeze protection is inadequate. Add **Sludgehammer Universal Corrosion Inhibitor** (35297) if pH is below 8.5. (see Maintenance)

APPROVALS & LISTINGS

The virgin propylene glycol used in **Cryo-Tek** is "GRAS" (Generally Recognized As Safe) for incidental contact with food.

SPECIFIC USES

Use any **Cryo-Tek** Anti-Freeze in hydronic closed loop heating and cooling systems, solar heating systems, and general plumbing systems that require freeze protection. Operating Temperature Range for Closed System: Up to 250°F

SPECIFIC APPLICATIONS*

Add any **Cryo-Tek** product to protect pipes from freezing and bursting. Also prevents freeze-ups in chiller systems, recreational vehicles, seasonal homes, mobile homes, trailers, boats, sprinkler systems, and industrial use.

*For special applications which may not be covered on this or other Oatey literature, please contact Oatey Technical Services Department by phone 1-800-321-9532, or fax 1-800-321-9535, or visit our technical database web-site at www.Oatey.com.

WARNINGS OR CAUTIONS

- Read all cautions and directions carefully before using this product.
- Not for use in steam systems.
- Not for use with CPVC pipe and fittings.
- Use **Hercules Boiler Liquid** or **Base Hit II** to stop leaks on system containing **Cryo-Tek** products.
- Use **Hercules Boiler & Heating System Cleaner** or **Sizzle** to clean system prior to using **Cryo-Tek** (see installations instructions).
- Do not use in internal combustion engines as a coolant.
- Do not use in water softeners. Disconnect all water softeners from system or provide back flow protection to prevent contamination of brine or resin bed.
- **Cryo-tek** products are not recommended:
 1. For use in systems containing galvanized components.
 2. For open solar systems and systems where operating stagnation temperatures are regularly over 300°F / 150°C.
 3. For systems with concentrating solar collectors or evacuated tube solar collectors.
 4. In systems containing aluminum. **(Please check with equipment manufacturer of system to determine compatibility with this product).**

CAUTION REGARDING COMPETITIVE PRODUCTS:

Hercules **Cryo-Tek** products are formulated using virgin propylene glycol and high purity Triple Protection Additives for assurance of materials compatibility and non-toxicity characteristics. Dilution or mixing of **Cryo-Tek** products with other manufacturers' products may compromise these critical requirements and is not recommended.

PHYSICAL PROPERTIES

pH	9.0 - 9.5
Density lb/gal. 60°F - 65°F	8.78 lb./ gallon
Specific Gravity 60°F - 65°F	1.054
Specific Heat BTU/lb°F @ 160° F	.843
Boiling Point	230°F / 110°C
Appearance and color	Red liquid. Odorless.

MATERIAL SAFETY INFORMATION

FOR MORE INFORMATION ON THIS PRODUCT, REQUEST SAFETY DATA SHEET (SDS) #7301E

For Delivery By Fax	Call 1-800-321-9535
Internet	See SDS section of www.Oatey.com

HMIS® ratings Health: 0
 Flammability: 0
 Physical hazard: 0

SIZE & PACKING

STOCK NUMBER	SIZE	PACKING	WEIGHT/CASE
Cryo-Tek - 100			
35281	1 gal.	6	54.0 lbs
35284	5 gal.	1	46.9 lbs
35286	30 gal.	1	286.0 lbs
35287	55 gal.	1	521.0 lbs
ALSO AVAILABLE			
35290 Refractometer	-	1	0.25 lbs
35272 pH Meter	-	1	0.3 lbs