

THERMAL CHARGE®

HEAT TRANSFER FLUID

PGHD

Inhibited Propylene Glycol-Based Heat Transfer Fluid



DESCRIPTION

Thermal Charge® PGHD heat transfer fluid is a heavy duty formulation of propylene glycol and a specially formulated package of industrial corrosion inhibitors for use in closed systems with copper and other metal components, and for systems that require reliability in higher temperature operations. This product is not intended for use in vehicle or stationary engine applications.

BENEFITS

- **Excellent low temperature pumpability and hot surface protection**
- **Specifically formulated for use in systems that have a maximum temperature of 325 °F**
- **Robust inhibitor package increases component life:** Formulated with a heavy duty industrial inhibitor package for superior corrosion protection and resistance to fouling. Meets the ASTM D3306 requirements for ASTM D1384 which is the industry standard test method to demonstrate corrosion protection of all system metals. Dilutions below 65% volume meet ASTM D8039 requirements for use in heat transfer applications and HVAC systems
- **Lower acute oral toxicity*:** Reducing the risk of harm if accidentally ingested by mammals
- **Nonflammable:** Because the flash and fire points of Thermal Charge® PGHD are above the boiling point of water, it presents little fire hazard in storage or when mixed with water at concentrations of 20% or greater

*as compared to ethylene glycol-based formulas.

SUITABLE APPLICATIONS

- Boiler systems
- Fire sprinkler systems
- Hydronic heating or cooling systems
- Ice-making & skating rink systems
- Power generating systems
- Secondary loop refrigeration
- Snow melting systems
- Solar heating systems
- Thermal energy storage
- Trace line insulation & heating
- Water bath heaters

FREEZE/BURST PROTECTION CHART Volume % Thermal Charge® PGHD Required			
TEMPERATURE		FOR FREEZE PROTECTION	FOR BURST PROTECTION
(°F)	(°C)		
20	-7	19%	13%
10	-12	30%	21%
0	-18	38%	25%
-10	-23	44%	30%
-20	-29	48%	32%
-30	-34	52%	35%
-40	-40	57%**	37%
-50	-46	60%**	37%
-60	-51	63%**	37%

**At temperatures below 0°F (-18°F), PG based fluids can demonstrate increased viscosities >1,000 cps (>1,000 mPa-s) that can promote cold-start pumpability issues within applications.

To order, please call **1-800-323-5440**
or email: commercial@owi.com

For technical support, call **1-800-477-5847**

PROPERTIES	ASTM TEST METHOD	TYPICAL VALUES FOR THERMAL CHARGE® PGHD									
		% VOL 30%		35%	40%	45%	50%	55%	60%	65%	70%
Specific Gravity @ 60/60 °F	D1122	1.02-1.04	1.03-1.04	1.03-1.04	1.03-1.04	1.03-1.04	1.04-1.048	1.04-1.05	1.04-1.05	1.05-1.06	1.05-1.06
pH of Solution min.	D1287	9	9	9	9	9	9	9	9	9	9
Reserve Alkalinity, mL	D1121	report	report	report	report	5 min	5 min	5 min	5 min	5 min	10 min
Freezing Point, °F/°C	D1177, D3321, D6660	9/-13	2/-17	-6/-21	-16/-27	-28/-33	-43/-42	<-60/-51	<-60/-51	<-60/-51	<-60/-51
Burst Point, °F/°C	-	-14/-26	-38/-39	-60/-51	-60/-51	-60/-51	-60/-51	<-100/-73	<-100/-73	<-100/-73	<-100/-73
Boiling Point*, °F/°C min.	D1120	216/102	217/103	219/104	220/104	222/106	223/106	225/107	227/108	229/109	310/154
Chloride, ppm	D5827	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Odor	-	Not Offensive									
Color	-	Fluorescent Yellow									

* At atmospheric pressure
At 50/50 dilution

PRODUCT AVAILABILITY

	PART NUMBER										
Bulk	TDPO30	TDPW30	TDPO40	TDPW40	TDPW50	TDPO50	TDPO60	TDPW60	TDPO70	TDP000	
275 Gallon Tote	TDPO38	TDPW38	TDPO48	TDPW48	TDPW58	TDPO58	TDPO68	TDPW68	TDPO78	TDP008	
55 Gallon Drum	TDPO31	TDPW31	TDPO41	TDPW41	TDPW51	TDPO51	TDPO61	TDPW61	TDPO71	TDP001	
5 Gallon Pail	-	-	-	-	TDPW55	-	-	-	-	TDP005	

Manufactured for Old World Industries, LLC., Northbrook, IL 60062 • (800) 289-7234
MADE IN THE USA OF DOMESTIC AND FOREIGN CONTENT
©2026 Old World Industries, LLC. All Rights Reserved.
THERMAL CHARGE, PEAK and PEAK & Mountain Graphic are trademarks of Old World Industries, LLC.

