

# HY-THERM™ 707

Synthetic Heat Transfer oil



## Beyond Synthetic™

Hy-Therm™ 707 is a synthetic, heat transfer fluid that is more efficient than mineral oil based fluids. Its thermal conductivity (0.121 BTU/hr ft °F at 400°F) is 50 to 100 percent higher than many widely used heat transfer fluids. This means that heat goes in and comes out of Hy-Therm™ 707 much more quickly. A pound of Hy-Therm™ 707 can hold 30 + percent more heat with its specific heat of 0.665BTU/lb. °F at 400°F. Hy-Therm™ 707 can safely be used in open systems up to 400°F and in closed systems under inert gas at 700°F. Fluid life and system cleanliness can greatly be enhanced when Hy-Therm™ 707 is used with inert gas (nitrogen, etc.) blanketing. Its low temperature fluidity eliminates the need to drain fluid during cold weather shutdowns, a common problem with many heat transfer fluids.

System using Hy-Therm™ 707 are both safer and cleaner. Hy-Therm™ 707 higher flash as up to 25% more heat is removed than comparable petroleum heat transfer oils. Systems remain cleaner as Hy-Therm™ 707 minimizes carbon deposits assuring superior heat transfer efficiency.

Hy-Therm™ 707 is environmentally responsible. All components comply with TSCA, EPA and OSHA requirements.

## Performance Advantages:

- High Flash Point**  
 Hy-Therm™ has a higher flash as up to 25 percent more heat is removed than comparable petroleum heat transfer oil.
- Systems Remain Cleaner**  
 System remain cleaner because Hy-Therm™ minimizes carbon deposits, which ensures superior heat transfer efficiency.
- Environmentally Responsible**  
 Hy-Therm™ is environmentally responsible. All components comply with TSCA, EPA and OSHA requirements.

## Typical Properties\*

Viscosity		
cSt @ 40°C		32
cSt @ 100°C		5.9
SUS @ 100°F		166
SUS @ 210°F		47
Viscosity Index		150
Flash °F		460
Fire °F		520
Pour Point °F		-60
Specific Gravity		.835
Lbs. per Gallon		6.9
Distillation, °F (Gas Chromatograph)		
IBP		786
20%		810
50%		915
80%		980
90%		1001
E.P.		1106
Specific Heat, Btu/lb °F		
100 °F		0.522
300 °F		0.620
500 °F		0.718
ASTM D2273 Sedimentation, vol %		0.001
ASTM D892, Foam Test		0/0
ASTM D942 Evaporation Loss, Wt %		
22 hrs. @ 300°F, 760 Hg		0.3
Density, g/cc (Dialatometer)		
Temp., °C	(°F)	
0.0	32	.8482
15.5	60	.8350
25	77	.8268
50	122	.8053
75	167	.7834
100	212	.7614
125	257	.7391
150	302	.7168
175	347	.6944
190	374	.6810

\*All properties are typical and may vary.