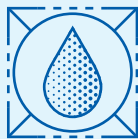




CITGO[®] Hytherm[®] Oil 46

OVERVIEW



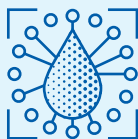
- A premium-quality heat transfer oil formulated with high viscosity index, paraffinic base stocks and a special high-temperature detergent/dispersant additive package.

FEATURES & BENEFITS



- Highly efficient heat transfer due to high specific heat and good thermal conductivity at all temperatures.
- Contains rust and oxidation inhibitors.
- A special additive package helps maintain system cleanliness and operational performance, reducing downtime and maintenance costs.

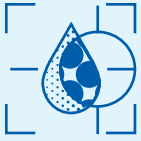
APPLICATIONS



- Meets the exacting requirements of both open and closed heat transfer systems, at temperatures up to 600°F.
- Refer to equipment owner's manual for proper lubricant recommendation.

CITGO HYTHERM OIL 46 PHYSICAL DATA

Temp., °F	Specific Gravity	Specific Heat BTU/lb/°F	Thermal Conductivity BTU/hr/ft ² /°F	Viscosity cSt
60	0.871	0.442	0.0790	175
100	0.857	0.463	0.0770	51
200	0.824	0.517	0.0738	8.0
300	0.792	0.570	0.0715	2.9
400	0.761	0.624	0.0697	1.6
500	0.731	0.678	0.0675	1.0
600	0.697	0.732	0.0647	0.8

PROPERTIES**Typical Properties for CITGO Hytherm Oil 46:**

ISO VIS Grade (SAE Grade)	46
Material Code	637130001
Gravity, ASTM D4052, °API	31.5
Density, lb/gal at 60°F	7.25
Flash Point, ASTM D92, °F	453
Viscosity ASTM D445	
cSt at 40°C	48.5
cSt at 100°C	7.0
Viscosity Index, ASTM D2270	100
Pour Point, ASTM D97, °F	16
Color, ASTM D1500	2.0
Acid No., ASTM D974	<0.01
Volume Factor, % per °F	0.033
Distillation, °F, ASTM D2887, IBP, °F	650
	5%
	734
	10%
	771
	50%
	858
	95%
	944

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