

OVERVIEW

Duratherm LITE thermal oil has same physical properties as Duratherm 600 but formulated with a lighter dose of additives.

It is engineered for precise and efficient temperature control up to 600°F (315°C). With a high flash point, low vapor pressure and an initial boiling point above the maximum operating temperature **Duratherm Lite** thermal oil offers safety and performance for many diverse applications. Economically ideal for applications that are prone to fluid loss or attrition due to equipment changes such as thermoforming, die casting, press molding etc.

APPLICATION

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THE DIFFERENCE

Our exclusive additive package, including a proprietary dual stage anti-oxidant, ensures long trouble free operation. Duratherm also incorporates metal deactivators, a seal and gasket extender, de foaming and particle suspension agents.

LASTS LONGER

In the thermal oil industry cost is always a concern, however fluid longevity and resistance to harmful fouling are of equal importance.

Air contact is normally detrimental to a fluid. Oxidation can cripple your system and if left unchecked will ultimately cause catastrophic failure. Unscheduled downtime due to oil failure has a high cost and negative effect on production.

The Duratherm product line was developed with this in mind. Most other fluids fall short in their protection from oxidation and can quickly foul a system. Duratherm is engineered to give unsurpassed levels of protection and service life.

ENVIRONMENTAL

Duratherm LITE thermal oil is environmentally friendly, non-toxic, non-hazardous and non-reportable. Worker health and safety is of great concern, **Duratherm LITE** poses no ill effect to worker safety. After its long service life it can easily be disposed of with other waste oils.

SYSTEM CLEANING

In our effort to truly service the heat transfer industry, we have developed four unique and specific heat transfer system cleaners. Ranging from preventative maintenance system cleaners to emergency downtime system revivers, we have a cleaner that fits your needs and schedule.

DURATHERM LITE PROPERTIES

Appearance: colorless, clear and bright liquid		
Maximum Bulk/Use Temp.*	600°F	315°C
Flash Point ASTM D92	435°F	224°C
Fire Point ASTM D92	464°F	240°C
Autoignition ASTM E-659-78	680°F	360°C
Viscosity ASTM D445		
cSt at 104°F / 40°C	34.3	
cSt at 212°F / 100°C	5.6	
cSt at 600°F / 316°C	0.7	
Pour Point ASTM D97	14°F	-10°C
Density ASTM D1298		
	lb/ft³	g/ml
at 100°F / 38°C	52.7	0.844
at 500°F / 260°C	43.3	0.693
at 600°F / 316°C	41.0	0.656
Average Molecular Weight	372	
Carbon Residue ASTM D189	0.005	% Mass
Sulphur Content X-RAY	<.001	weight %
CU Strip Corrosion ASTM D130	1a	
Thermal Expansion Coefficient	0.0564 %/°F	0.1011 %/°C
Thermal Conductivity		
	BTU/hr F ft	W/m.K
at 100°F / 38°C	0.082	0.142
at 500°F / 260°C	0.075	0.130
at 600°F / 316°C	0.074	0.128
Heat Capacity		
	BTU/lb F	kJ/kg K
at 100°F / 38°C	0.470	1.967
at 500°F / 260°C	0.645	2.700
at 600°F / 316°C	0.680	2.870
Vapor Pressure ASTM D2879		
	psia	kPa
at 100°F / 38°C	0.00	0.00
at 500°F / 260°C	0.39	2.68
at 600°F / 316°C	1.62	11.19
Distillation Range ASTM D2887		
	10%	715°F (379°C)
	90%	886°F (474°C)
*Maximum Film Temp.	650°F	343°C

The values quoted are typical of normal production. They do not constitute a specification.