DURATHERM
EXTENDED LIFE FLUIDS

DURATHERM LT

OVERVIEW

Duratherm LT heat transfer fluid is engineered for applications requiring process temperatures ranging from -30˚F to 600˚F.

Ideal for batch processing requiring heating and cooling cycles. Eliminates the need for heat tracing in outdoor applications.

APPLICATION

Duratherm LT is an oxidative and thermally stable, high performance, long lasting, environmentally friendly heat transfer fluid. **Duratherm LT is** engineered with a broad temperature range offering precise temperature control between -30˚F and 600˚F.

Duratherm LT is ideal for batch processing requiring heating and cooling cycles and eliminates the need for heat tracing in outdoor applications.

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

DURATHERM LT PROPERTIES

Appearance: colorless, clear and bright liquid		
Maximum Bulk/Use Temp.*	600˚F	315˚C
Flash Point ASTM D92	329°F	165°C
Fire Point ASTM D92	370°F	188°C
Autoignition ASTM E-659-78	675°F	357°C
Viscosity ASTM D445		
cSt at 104°F / 40°C	7.9	
cSt at 212°F / 100°C	2.3	
cSt at 600°F / 316°C	0.5	
Pour Point ASTM D97	-72°F	-58°C
Density ASTM D1298	**lb/ft3**	**g/ml**
at 100˚F / 38˚C	50.1	0.802
at 500˚F / 260˚C	40.4	0.65
at 600˚F / 316˚C	38.9	0.623
Average Molecular Weight	395	
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**	**BTU/hr F ft**
at 100°F / 38°C	0.081	0.140
at 500°F / 260°C	0.070	0.121
at 600°F / 316°C	0.066	0.114
Heat Capacity	**BTU/lb F**	**kJ/kg K**
at 100˚F / 38˚C	0.511	2.139
at 500˚F / 260˚C	0.691	2.914
at 600˚F / 316˚C	0.723	3.027
Vapor Pressure ASTM D2879	**psi**	**kPa**
at 100˚F / 38˚C	0.00	0.00
at 500˚F / 260˚C	4.19	28.88
at 600˚F / 316˚C	8.05	55.50
Distillation Range ASTM D2887	10%	613°F (323°C)
	90%	784°F (418°C)
***Maximum Film Temp.**	630°F	332°C

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