

OVERVIEW

Duratherm FG is rated for use up to 620°F and is engineered and manufactured to comply with the demands of food grade applications. **Duratherm FG** meets USDA requirements for incidental food contact (H1) and meets the requirements of 21CFR1783570 and is NSF registered.

Ideal for any application requiring food grade rated process oils such as food processing, bottling, food packaging 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 FG** also incorporates metal deactivators, a seal and gasket extender, defoaming 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 FG is environmentally friendly, non-toxic, non-hazardous and non-reportable. Worker health and safety is of great concern, **Duratherm FG** 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 4 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 FG PROPERTIES

Appearance: colorless, clear and bright liquid		
Maximum Bulk/Use Temp.*	620°F	332°C
Flash Point ASTM D92	440°F	227°C
Fire Point ASTM D92	466°F	241°C
Autoignition ASTM E-659-78	682°F	361°C
Viscosity ASTM D445		
cSt at 104°F / 40°C	34.6	
cSt at 212°F / 100°C	6	
cSt at 600°F / 316°C	0.7	
Pour Point ASTM D97	1°F	-17°C
Density ASTM D1298		
	lb/ft³	g/ml
at 100°F / 38°C	52.4	0.845
at 500°F / 260°C	43.4	0.695
at 600°F / 316°C	41.2	0.659
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	0.1016 %/°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	0.131
at 600°F / 316°C	0.074	0.128
Heat Capacity		
	BTU/lb F	kJ/kg K
at 100°F / 38°C	0.471	1.971
at 500°F / 260°C	0.651	2.704
at 600°F / 316°C	0.691	2.872
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	1.64	11.30
Distillation Range ASTM D2887		
	10%	769°F (410°C)
	90%	930°F (499°C)
*Maximum Film Temp.	670°F	354°C

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