DURATHERM
EXTENDED LIFE FLUIDS

DURATHERM G

OVERVIEW

Polyalkylene glycol based fluids such as UCON 500® are a widely used form of heat transfer fluid that until now offered only average performance, short fluid life and have not been compatible with most other types of heat transfer fluids.

Duratherm G's exclusive additive system now allows for its successful use in high demand applications like those found in the plastic industry, die casting and even performs and lasts exceptionally well in open baths.

APPLICATION

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COMPATIBILITY

Duratherm G thermal fluid not only outperforms most other fluids it also contains a unique and proprietary additive that makes it compatible with the more commonly used petroleum based fluids. This allows for a worry free transition across different fluid chemistries and eliminates any need for special procedures.

We've also reduced odors and improved fluid clarity when compared to other glycol thermal fluids.

LASTS LONGER

In the thermal 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.

Duratherm G thermal fluid contains our proprietary blend of anti-oxidants, corrosion inhibitors, metal deactivators, seal and gasket extenders etc. to ensure a long trouble free service life in even the most demanding, extreme oxidation applications.

DURATHERM G PROPERTIES		
Appearance: clear liquid, very slight yellow tint		
Maximum Bulk/Use Temp.*	500°F	260°C
Flash Point ASTM D92	511°F	267°C
Fire Point ASTM D92	543°F	284°C
Autoignition ASTM E-659-78	704°F	373°C
Viscosity ASTM D445		
cSt at 104°F / 40°C	48.3	
cSt at 250°F / 121°C	6.0	
cSt at 500°F / 260°C	1.5	
Pour Point ASTM D97	-40°F	-40°C
Density ASTM D1298	**lb/ft3**	**g/ml**
at 100°F / 38°C	57.1	0.914
at 250°F / 121°C	54.5	0.873
at 500°F / 260°C	49.2	0.788
Thermal Expansion Coefficient	0.0377 %/°F	0.0801 %/°C
Thermal Conductivity	**BTU/hr F ft**	**BTU/hr F ft**
at 100°F / 38°C	0.095	0.164
at 250°F / 121°C	0.088	0.152
at 500°F / 260°C	0.076	0.131
Heat Capacity	**BTU/lb F**	**kJ/kg K**
at 100°F / 38°C	0.470	1.967
at 250°F / 121°C	0.510	2.135
at 500°F / 260°C	0.560	2.345
Vapor Pressure ASTM D2879	**psi**	**kPa**
at 100°F / 38°C	0.04	0.27
at 250°F / 121°C	0.16	1.10
at 500°F / 260°C	0.56	3.79
Distillation Range ASTM D2887	10%	694°F (367°C)
	90%	957°F (513°C)
***Maximum Film Temp.**	550°F	287°C

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