



OVERVIEW

DELF 600 is an oxidative and thermally stable heat transfer fluid (thermal oil) rated to 600°F (315°C). Long lasting and environmentally friendly it offers precise temperature control at an economical cost.

APPLICATION

DELF 600 is engineered for precise and efficient temperature control up to 600°F (315°C) With a high flashpoint, low vapor pressure and an initial boiling point above the maximum operating temperature **DELF 600** offers safety and performance for many diverse applications.

THE DIFFERENCE

DELF 600 thermal oil contains the industry's most effective and resilient blend of additives to ensure long-lasting, trouble-free service. Our exclusive system includes a proprietary, dual stage anti-oxidant and a special blend of metal deactivators, extenders, and other agents that prolong fluid life and help keep systems clean. That also means longer life for parts like pumps and rotary seals.

LASTS LONGER

Oxidation can cripple your system. Left unchecked, it will ultimately cause catastrophic failure and costly downtime. That's why **DELF 600** thermal oil offers unsurpassed levels of protection against oxidation, and a service life that other fluids simply can't match.

RUNS CLEANER

DELF 600 thermal oil delivers superior resistance to sludging, a problem plaguing most other fluids. That makes it the best defense against extreme oxidation found in many of today's demanding manufacturing environments, including plastics processing, molding, casting, asphalt, paint, chemical and a wide variety of other applications. In fact, our exclusive additive technology makes **DELF 600** the perfect solution for all applications, large or small requiring precise temperature control up to 600° F (315°C).

ENVIRONMENTAL

DELF 600 thermal oil is environmentally friendly, non-toxic, non-hazardous and non-reportable. It poses no ill effect to worker safety and does not require special handling. After its long service llife, **DELF 600** thermal oil can easily be disposed of with other waste oils.

DELF 600 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
Thermal Conductivity at 100°F / 38°C	BTU/hr F ft 0.082	W/m.K 0.142
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at 100°F / 38°C	0.082	0.142
at 100°F / 38°C at 500°F / 260°C	0.082 0.075	0.142 0.130
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C	0.082 0.075 0.074	0.142 0.130 0.128
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity	0.082 0.075 0.074 BTU/lb F	0.142 0.130 0.128 kJ/kg K
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity at 100°F / 38°C	0.082 0.075 0.074 BTU/lb F 0.470	0.142 0.130 0.128 kJ/kg K 1.967
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity at 100°F / 38°C at 500°F / 260°C	0.082 0.075 0.074 BTU/lb F 0.470 0.645	0.142 0.130 0.128 kJ/kg K 1.967 2.700
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C	0.082 0.075 0.074 BTU/lb F 0.470 0.645 0.680	0.142 0.130 0.128 kJ/kg K 1.967 2.700 2.870
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Vapor Pressure ASTM D2879	0.082 0.075 0.074 BTU/Ib F 0.470 0.645 0.680 psi	0.142 0.130 0.128 kJ/kg K 1.967 2.700 2.870 kPa
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Vapor Pressure ASTM D2879 at 100°F / 38°C	0.082 0.075 0.074 BTU/lb F 0.470 0.645 0.680 psi 0.00	0.142 0.130 0.128 kJ/kg K 1.967 2.700 2.870 kPa 0.00
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Vapor Pressure ASTM D2879 at 100°F / 38°C at 500°F / 260°C	0.082 0.075 0.074 BTU/lb F 0.470 0.645 0.680 psi 0.00 0.39	0.142 0.130 0.128 kJ/kg K 1.967 2.700 2.870 kPa 0.00 2.68
at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Heat Capacity at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C Vapor Pressure ASTM D2879 at 100°F / 38°C at 500°F / 260°C at 600°F / 316°C	0.082 0.075 0.074 BTU/lb F 0.470 0.645 0.680 psi 0.00 0.39 1.62	0.142 0.130 0.128 kJ/kg K 1.967 2.700 2.870 kPa 0.00 2.68 11.19

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