

OVERVIEW

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APPLICATION

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THE DIFFERENCE

Not only does **Duratherm HF** heat transfer oil have one of the highest flashpoints available it also 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 **Duratherm HF** heat transfer oil offers unsurpassed levels of protection against oxidation, and a service life that other fluids simply can't match.

RUNS CLEANER

Duratherm HF heat transfer 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.

ENVIRONMENTAL

Duratherm HF heat transfer 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 life, **Duratherm HF** heat transfer oil can easily be disposed of with other waste oils.

SYSTEM CLEANING

If your existing fluid has let you down and left you with a system full of sludge or carbon, we've developed a full line of heat transfer system cleaners to get your system back to like-new condition. Contact us for complete details.

DURATHERM HF PROPERTIES

| | | |
|---|--------------------------|--------------------|
| Appearance: colorless, clear and bright liquid | | |
| Maximum Bulk/Use Temp.* | 640°F | 338°C |
| Flash Point ASTM D92 | 530°F | 276°C |
| Fire Point ASTM D92 | 582°F | 305°C |
| Autoignition ASTM E-659-78 | 830°F | 443°C |
| Viscosity ASTM D445 | | |
| cSt at 104°F / 40°C | 103 | |
| cSt at 212°F / 100°C | 10.45 | |
| cSt at 600°F / 316°C | 0.81 | |
| Pour Point ASTM D97 | 15°F | -9°C |
| Density ASTM D1298 | lb/ft³ | g/ml |
| at 100°F / 38°C | 53.85 | 0.862 |
| at 500°F / 260°C | 44.1 | 0.706 |
| at 600°F / 316°C | 41.9 | 0.671 |
| Average Molecular Weight | 399 | |
| Carbon Residue ASTM D189 | 0.005 | % Mass |
| Sulphur Content X-RAY | <.001 | weight % |
| CU Strip Corrosion ASTM D130 | 1a | |
| Thermal Expansion Coefficient | 0.0562 %/°F | 0.1011 %/°C |
| Thermal Conductivity | BTU/hr F ft | BTU/hr F ft |
| at 100°F / 38°C | 0.082 | 0.142 |
| at 500°F / 260°C | 0.075 | 0.13 |
| at 600°F / 316°C | 0.074 | 0.127 |
| Heat Capacity | BTU/lb F | kJ/kg K |
| at 100°F / 38°C | 0.445 | 1.863 |
| at 500°F / 260°C | 0.618 | 2.587 |
| at 600°F / 316°C | 0.663 | 2.775 |
| Vapor Pressure ASTM D2879 | psi | kPa |
| at 100°F / 38°C | 0.00 | 0.00 |
| at 500°F / 260°C | 0.20 | 1.40 |
| at 600°F / 316°C | 1.84 | 12.69 |
| Distillation Range ASTM D2887 | 10% | 769°F (410°C) |
| | 90% | 930°F (499°C) |
| *Maximum Film Temp. | 690°F | 365°C |

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