



HEAT TRANSFER OIL

HEAT TRANSFER FLUIDS

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Heat Transfer Oil is a highly refined, thermally stable paraffinic petroleum oil formulated for use as a hot oil medium in both open and closed heat transfer systems. It has outstanding stability at sustained high operating temperatures and is non-corrosive to copper and steel.

In service **Heat Transfer Oil** offers the following benefits:

- ◆ Good heat capacity and thermal conductivity for efficient heat transfer
- ◆ Good thermal stability to resist cracking at elevated temperatures
- ◆ Good oxidation stability to minimize in-service degradation
- ◆ Low viscosity for ease of start-up and improved pumpability
- ◆ Low volatility to minimize vapour pressure at elevated temperatures

Product Applications

Many industrial processes require heat for their operation and indirect heat is often preferred. The heat is produced at one location and is conducted to another location by a heat transfer medium. This method provides better temperature control and heat distribution and improved safety. A hot oil circulating system is a common means of heat transfer for indirect systems.

Product Recommendations and Approvals

Heat Transfer Oil is suitable for processes such as melting, boiling, distilling, drying, coating, bonding, vulcanizing, cooking and curing. These processes are used in industries such as soap, asphalt, plastic, resin, paint, rubber, paper, roofing, fiber board, textile, food, glue, chemical, varnish, wax, dye, petroleum, pharmaceutical, lumber and printing. **Heat Transfer Oil** is recommended whenever a performance mineral oil heat transfer fluid is required. It is not recommended for addition to systems containing aromatic oils or some synthetics.

Product Handling and Maintenance

Heat Transfer Oil is manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Special care is also recommended in handling used motor oils. Please refer to the Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

Typical Properties

Heat Transfer Oil Grade	600
ISO Viscosity Grade	46
Density @ 15°C, kg/m ³	874
Pour Point, °C	-20
Flash Point, °C	205
Kinematic Viscosity, cSt	
@ 40°C	46.0
@ 100°C	7.1
Properties @ 260°C / 500°F	
Density, kg/m ³	697.5
Thermal Conductivity, W/m.K	0.114
Specific Heat, kJ/kg.K	2.75
Vapour Pressure, mm Hg	30.9
Maximum Recommended Bulk Oil Temp, °C,(°F)	
Open System	190 (400)
Closed System	284 (600)
Maximum Recommended Skin Temperature, °C	325
Minimum Pump Start Up Temperature, °C	-10

The typical properties shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.