



TECHNICAL DATA

M-525 SPECIAL HEAT TRANSFER THERMAL OIL

M-525 Is an advance high quality, Non-Corrosive mineral oil possessing low vapour pressure fluid that is formulated to provide fast and efficient heat transfer and thermal conductivity.

FEATURES:

M-525 – Trans Heat Thermic Oil provide the following performance characteristics:

1. **High Viscosity Index** – This results in a minimum change in viscosity over a broad temperature range.
2. **High Thermal and Oxidative Stability** – This results in the product having resistance to cracking, carbon, sludge, varnish and laquer formation during high temperature operation.
3. **Low Volatility Characteristics** – The low volatility of paraffin base oils not only results in not only lower makeup requirements, but also helps eliminate vapor lock in circulating pump and reduces the possibility of cavitation, which is destructive to centrifugal pump blades.
4. Excellent Heat Transfer Properties, Maximize cooling.
5. Low vapor pressure at elevated temperatures and high boiling point to prevent pressure build-up.
6. Excellent hydrolytic stability and resistance to emulsification with water.
7. Non-fouling on degradation
8. Virtually odorless and essentially non-toxic.
9. Long service life for proven trouble-free operation.

APPLICATION:

M-525 Is highly recommended for non pressurized, closed system application with expansion tank temperatures upto 320°C where Flash Points 229.44°C and Fire Points Significantly Above 248.89°C. Such systems are mainly used Plastics & Metal Industries, Pharmaceuticals, Construction, Laundries etc.

Note:

Before being commissioned, the system should be pressure tested for leaks and then thoroughly flushed with M-525. Water should never be used. Having been flushed and drained, the system should be filled with Fresh M-525. Filling is complete when the oil level in the expansion chamber is at 30-45% expected at operating temperature. All air must be completely evacuated from the system before temperature is raised to operation level. The expansion chamber must be incorporated in the system as mineral oils get expended when heated.

TYPICAL SPECIFICATIONS:

API Gravity 60°F (ASTM D-287)	31
Density at 15 C (ASTM D 1298)	875
Color (ASTM D 1500)	<1.0
Viscosity Index (ASTM D-2270)	97
Flash Point °F/°C (ASTM D-92)	445°/229.44°
Fire Point °F/°C (ASTM D-92)	480°/248.89°
Auto-ignition Temperature °F/°C	695°/368.33°
Pour Point °F/°C (ASTM D-97)	5°/-15°
Conradson Carbon % (ASTM D-189)	0.2
Ramsbottom Carbon Mass % (ASTM D-524)	0.5
Analine Point °F/°C (ASTM D-611)	227°/108.33°
Total Acid No. (ASTM D-664)	0.2
Copper Strip Corrosion Test (ASTM D-130)	1a
Foam Seq I,II,III (D 892)	Pass