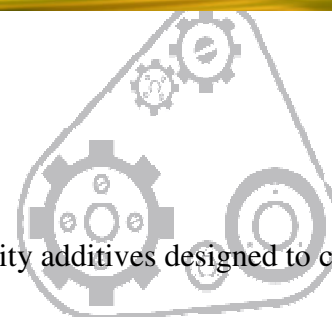




HEAT TRANSFER OIL

MOTOROL HEATRAN - Semi Synthetic



Introduction:

MOTOROL Heatran grades are manufactured by using semi synthetic base oil and high quality additives designed to cover a broad range of heat transfer applications.

Applications:

MOTOROL Heatran oils widely used in close circulating heating system in textile, pharmaceutical and many other processing industries.

Advantages:

- ◆ Excellent oxidation and chemical stability
- ◆ Good heat transfer properties
- ◆ Low volatility to avoid losses
- ◆ Non - corrosive and non - toxic
- ◆ High flash and fire point

Performance Standard:

Proprietary Grade

Typical Specifications:

Sr. No.	Characteristics	Test Methods	MEDIUM	HEAVY
1	Appearance	VISUAL	Clear Liquid	Clear Liquid
2	Colour (ASTM), Max	ASTM D-1500	2.0	2.0
3	Kinematic Viscosity at 40 °C, cSt	ASTM D-445	28 - 35	41 - 50
4	Flash point °C, Min	ASTM D-92	210	220
5	Pour point °C, Max	ASTM D-97	(-) 12	(-) 15
6	Copper corrosion at 100°C for 3 Hrs.	ASTM D-130	1A	1A
7	Neutralization Value mgKOH/g, Max	ASTM D-974	0.05	0.05
8	Thermal Conductivity, kcal/mh°C At 100°C At 300°C	ASTM D-2717-95	0.11 0.104	0.12 0.106
9	Specific Heat, cal/gm°C At 200°C At 300°C	ASTM D-3947-92	0.61 0.65	0.61 0.65
10	Vapour Pressure, mm Hg At 150°C At 200°C	ASTM D 5191-13	0.1 0.15	0.1 0.15

Environment, Health & Safety:

Every care has been taken to ensure the accuracy of the information in this PDS. This however may be affected by subsequent improvement in product (R&D). MSDS is available for all MOTOROL products on request.

MOTOROL products are unlikely to present any health and safety hazard with proper use for the correct application and maintain proper personal hygiene. Do not Spill oils on the shop floor, discharge into drains ,ground or water sources.