DIVYOL THERM 500 / 600 HEAT TRANSFER FLUIDS

Divyol Therm 500 and 600 are heat transfer fluids formulated using highly refined paraffinic oils with high viscosity index. These oils possess exceptional oxidation stability, high thermal conductivity and adequate specific heat to facilitate effective heat transfer. Mineral oils are generally preferred for use in heat transfer systems operating with temperatures ranging from 270 °C to 310 °C. In the operation, the heat transfer fluid is pumped to the tube furnace, gets heated and this hot oil is then passed through the process vessels from where it is conveyed back to the pump. An expansion tank of suitable design is connected to the suction side of the pump to take care of the variation in the volume. Divyol Heat Transfer Fluids have the correct viscosity; hence they are able to yield optimum heat transfer rates from well-designed systems.

Applications:

Divyol Therm 500 is recommended for use in heat transfer systems operating with bulk oil temperature up to 280 °C. Divyol Therm 600 provides superior performance due to its low Sulphur content and CCR value and is recommended for operating at temperature up to 300 °C. Divyol heat transfer fluids also function as lubricants for circulating pumps.

Advantages:

The properties of Divyol Therm heat transfer fluids 500 and 600 include low volatility and the absence of high pressure, which facilitates efficient compact units and associated space savings. Due to high boiling point they can be used without pressurization at maximum bulk temperature. These oils also generate the least amount of oxidation by-products and reduce oil change periods. There is also lower evaporation loss, and consequently a smaller difference to make up for, in oil volumes. Their low viscosity and excellent pumpability ensure lower power consumption.

Typical properties:

Sr. No.	Characteristics	Test Method	Divyol Therm	
			500	600
1	**Appearance**	Visual	Bright and clear	Bright and clear
2	**Colour, max.**	ASTM D 1500	<1	<1
3	**Flash point (COC), °C, min.**	ASTM D 92	200	220
4	**Kinematic viscosity at 40°C, cSt, min.**	ASTM D 445	30	35
5	**Viscosity index min.**	ASTM D 2270	95	100
6	**Pour point °C, max.**	ASTM D 97	-9	-15
7	**Ignition temperature °C**	–	>350	>350
8	**Initial boiling point °C**	ASTM D 1160	350	363
9	**Final boiling point °C**	ASTM D 1160	440	442
10	**CCR wt%**	–	<0.02	<0.02

The above properties are typical values and do not constitute specification of the product.