

## Product Data

### ZIE THERM T 32 Premium Heat Transfer Fluid

#### Description:

Zie Therm T 32 is a special heat transfer fluid processed from highly refined paraffinic oils with high viscosity index. The blend possesses 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 up to a bulk temperature of 300°C. These systems are so designed that 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.

#### Features and Benefits:

Zie Therm T 32 is recommended for use in heat transfer systems operating with bulk oil temperature up to 300 °C. It is also suitable for direct and secondary heating in conventional heat transfer operations in textile, pharmaceutical, chemical and processing industries. It also functions as a lubricant for circulating pumps. Having correct viscosity, Zie Therm T 32 is able to yield optimum heat transfer rates from well designed systems.

#### Specifications:

Zie Therm T 32 heat transfer fluid meets the performance standards of IS:14745:1999 (Reaffirmed 2004).

## Advantages:

Usage of Zie Therm T 32 heat transfer fluid results in lower evaporation losses, and consequently a smaller difference to make up for in oil volumes. It also leads to fewer oil change intervals and generates very little oxidation by-products during its operational life. Its low viscosity and excellent pumpability ensures lower power consumption.

## Typical characteristics:

Characteristics	Test Method	Zie Therm T 32
Appearance	Visual	Bright and clear
Kinematic viscosity, cSt at 40 °C	ASTM D 445	30
Viscosity index, min.	ASTM D 2270	119
Flash point (COC), °C, min.	ASTM D 92	220
Copper strip corrosion, at 100 °C, 3 hrs.	ASTM D 130	1A
Initial boiling point °C	ASTM D 1160	380
Final boiling point °C	ASTM D 1160	480
Coefficient of thermal expansion	-	0.00080
Thermal conductivity @ 29.5 °C cal/cm.s	-	0.000321

The above figures are typical figures with normal production tolerance.

## Health & Safety

These oils are unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained.