

SpeedTherm R220 / Heat Transfer Oil Max 220

SpeedTherm R220 is an industrial oil that prepared for use in non-pressurized closed circulation heat transfer system operating temperature up to 220 °C.

Usage

SpeedTherm R220 is used in closed heat conductive systems operating without pressure.

Matters to be Considered in Operating Conditions:

- Oil film temperature of 220 °C, the heating should be initiated prior to circulation to exceed. Heating should be continued even after the end of circulation for at least two hours.
- The oil flow should always be turbulent, with a flow rate of around 2.5-3 m/sec.
- The heating element must contain refractory material.
- In case of oil pump failure, the system must have an alarm, and if possible, a backup pump should automatically activate or be quickly activated manually. The flame should never be in direct contact with the heating tube. In such cases, thermal cracking may occur due to sudden localized temperature increases.
- There should be an expansion tank at the highest point of the system, and the temperature in this expansion tank should not exceed 60 °C.
- Sufficient ventilation valves should be provided to release trapped air and steam during the initial heating.
- The initial heating up to 110 °C should be done very slowly, and water vapor and air should be expelled from the system using ventilation valves.
- Pressure gauges should be placed at critical points in the system, and the system should be kept under constant monitoring.

Features

Maximum Performance Thermal Stability: Mineral oils are exposed to two types of degradation at elevated temperatures. 1) Cracking; degradation caused by the breakdown of the carbon chains of hydrocarbon molecules. 2) Oxidation; oxidation by combining with oxygen in the air at high temperatures. SpeedTherm R220 is manufactured using a base oil of a quality that can withstand both of these effects.

Low Evaporation Percentage: The evaporation rate is low.

Operating Performance at Low Temperature: Operating performance at low temperatures is good.

Technical Specifications

*Kinematic Viscosity @40˚C, cSt	ASTM D 445	32
*Viscosity Index	ASTM D 2270	101
*Flash Point, °C	ASTM D 92	216
*Pour Point, °C	ASTM D 97	-15

**Data given above are typical properties and may vary slightly.*

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