

DESCRIPTION

FORCE SYNTHETIC HEAT TRANSFER OIL is a fully synthetic used for heat transfer systems. It has excellent oxidation and thermal stability and able to withstand decomposition.

BENEFITS

FORCE SYNTHETIC HEAT TRANSFER OIL provides the following benefits:

- Resistance to high-temperature degradation, thus preventing deposit and sludge formation.
- Prevents deposit and sludge formation during operation, while the superior quality level ensures thermal stability up to temperatures where cracking starts.
- Good demulsibility and air-separation performance, thus ensuring proper operation of the heat transfer unit, by preventing the formation of steam and air bubbles at the hottest points.
- The heat transfer characteristics of the oil remain practically unchanged while in service, due to the very good oxidation resistance of the oil and their high temperature stability.

APPLICATIONS

- FORCE SYNTHETIC HEAT TRANSFER OIL is recommended for all 'open' or 'closed' type units with:
- maximum boiler outlet temperature of 305°C.
- maximum boiler wall temperature of 320°C.

CAUTION

When starting-up a new unit or when restarting after maintenance, and also in the case of irregular operation at normal temperature caused by residual moisture in the oil, the temperature of the unit should be reduced to around 100°C and all the steam blown off before returning to the normal working temperature.

TYPICAL CHARACTERISTICS
FORCE SYNTHETIC HEAT TRANSFER OIL

ISO GRADE	32	46
Viscosity, at 40°C, cSt	33.0	47.50
at 100°C, cSt	6.00	7.80
Viscosity index	139	142
Flash Point, COC, deg C	262	262
Pour Point, °C	-14	-19
Specific gravity, 15/15°C	0.843	0.848
Autoignition Temperature, °C	330	350
Expansion Coefficient, per °C	0.00070	0.00070
Physical & Thermal Properties @ 260°C		
Density, kg/litre	0.76	0.70
Dynamic Viscosity, cP	1.05	1.20
Specific Heat, kcal/kg/°C	2.51	2.50
Thermal Conductivity, kcal/m/hr/°C	0.12	0.12
Vapour Pressure, mmHg	2.0	2.0