

QATOL THERM HTF FLUID

Premium Performance Heat transfer fluid

PRODUCT DESCRIPTION:

QATOL THERM HTF FLUID are paraffinic heat transfer fluids for use in closed un-pressurized heat transfer systems operating at bulk oil temperatures up to 320°C (ISO 22 to 150). For ISO 5 & 10 the maximum bulk operating temperature is 200 °C . They provide excellent resistance to thermal cracking and chemical oxidation and are non-toxic, have a very low odor level and have no detrimental effect on selected seals. They provide high specific heat and thermal conductivity at all temperatures and therefore give rapid heating and efficient operation of the heat transfer system.

APPLICATIONS

QATOL THERM HTF FLUID grades have high specific heat and thermal conductivity at all temperatures and, therefore, will give rapid heating and flexibility in a system. The characteristics of these products make them ideal where high heat transfer rates combined with high flow rates are desired.

The application limits of heat transfer oils depend first on circulating speed, and second on temperature in closed circuit systems. In general, the minimum velocities vs. temperatures are as follows:

- Velocity of 1.5 m/s (5 ft/s) for operating temperatures below 200°C (400°F).
- Velocity of 2.0 m/s (7 ft/s) for operating temperatures between 200 and 260°C (400 and 500°F).
- Velocity of 3.0 m/s (10 ft/s) for operating temperatures between 260 and 300°C (500 and 575 °F).
- Velocity of 3.5 m/s (12 ft/s) for operating temperatures above 300°C (575 °F).

KEY PROPERTIES:

Properties	Units	Values									Test Methods
ISO Grade		22	32	37	46	68	100	150	220	320	-
Viscosity@ 40°C	mm ² /s	22	32	36.5	46.9	68	99.5	149	220	320	ASTM D-445
@ 100°C	mm ² /s	4.34	5.4	5.87	6.9	8.8	11.1	14.6	19	24	ASTM D-445
Viscosity Index	-	103	102	102	102	99	96	96	97	95	ASTM D-2270
Density @ 35°C	Kg/m ³	861	864	866	868	873	877	881	885	889	ASTM D-4052
Neutralization no.	mg KOH/g	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	ASTM D-664
Flash Point	°C	205	214	216	222	232	240	250	254	260	ASTM D-92
Pour Point	°C	-24	-24	-24	-24	-24	-18	-15	-12	-12	ASTM D-97

AVAILABLE PACKAGES: 208L, 25L, 20L,