THERMOL Plus™ HEAT TRANSFER OIL

	<u>Typical Properties</u>				
ISO Grade	22	32	46	56	68
Viscosity, cSt					
At 40 C	21.8	32.0	46.2	56.2	67.6
At 100 C	4.3	5.4	6.8	7.7	<i>8.</i> 7
Viscosity, SUS					
AT 100 F	115	166	239	292	351
At 210 F	41	44	49	51	55
Viscosity Index	103	102	101	100	100
Flash Point, (COC) Deg F	400	405	440	450	480
Pour Point, Deg F	-10	-5	-0	+5	+10
Deg C	-23	-21	-18	-15	-12
Maximum Allowable Film Temp., F.	575	600	630	690	750
Ramsbottom Carbon Resid, %wt	0.05	0.05	0.06	0.06	0.07
Fire Point, Deg F	440	475	510	525	550
Properties @ 260C/500F					
Heat Capacity, BTU/lb/Deg F	0.660	0.659	0.657	0.656	0.655
Viscosity, cSt	0.77	1.10	1.34	1.51	1.82
Vapor Pressure, mm/Hg	12	10	8	7	6
Specific Gravity	0.8628	0.8665	0.8708	0.8735	0.8762
Gravity, API @ 60 F	32.5	31.8	31.0	30.5	30.0

The values shown are typical of current production. Some are controlled in the manufacturing process, while others are not. All of them may vary within tolerable ranges.

These premium heat transfer oils are formulated to meet the demanding service requirements of circulating heat transfer systems. Thermal stability is achieved by utilizing hydrocracked base stocks with excellant additive chemistry for outstanding and oxidation resistance at sustained operating temperatures up to 600°F. The product is non-corrosive to steel and copper in closed systems resulting in long service life for both the fluid and equipment. Low volatility characteristics, especially ISO Grades 46, 56, & 68, reduce vapor lock in circulating pumps and diminishes the possibility of system cavitation.

APPLICATIONS

Recommended for heat exchangers where a hot-oil medium is the energy transfer mechanism, i.e. asphalt plants, boiler systems, crude heating. It is suggested that the appropriate ISO Viscosity should be considered for individual applications based on system requirements. The recommended maximum temperature range is 600°F for closed systems and 400°F for open systems.