

Heat Transfer Oil

ISO Grades: 22, 32, 46, 56, 68

Product Overview

These premium heat transfer oils are formulated to meet the demanding oxidation requirements of circulating hot oil systems. Thermal stability is outstanding and oxidation resistance at sustained operating temperatures up to 500°F characterizes the quality of these oils. The product is non-corrosive to steel and copper resulting in long service life for both the fluid and equipment. Low volatility, especially ISO Grades 46, 56, & 68, reduce vapor lock in circulating pumps and diminish the possibility of 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 - 665°F for closed systems and 400°F - 450°F for open systems.

Typical Properties

Property	ISO 22	ISO 32	ISO 46	ISO 56	ISO 68
Viscosity, cSt @ 40°C	20.1	32.2	46.6	56.0	63.9
Viscosity, cSt @ 100°C	4.1	5.3	6.7	7.2	8.2
Viscosity Index	103	95	95	95	94
Flash Point, COC (°F)	400	405	440	450	480
Pour Point (°F)	-10	-5	0	+5	+10
Maximum Allowable Film Temp., F.	425	480	630	690	750
Properties @ 260C/500F					
Heat Capacity, BTU/lb/Deg F	0.601	0.621	0.648	0.661	0.681
Viscosity, cSt	0.60	0.78	1.01	1.18	1.32
Vapor Pressure, mm/Hg	30	26	23	22	21
Specific Gravity	0.8628	0.8665	0.8708	0.8735	0.8762
Gravity, API @ 60°F	32.0	31.8	29.5	29.2	29.0

*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.