

THERM OIL Series

THERM OIL SERIES are heat transfer fluids that uses paraffin-based hydrocarbon oil as a base oil and has excellent thermal stability and oxidative stability. These are products suitable for temperature controllers, oil baths, etc.

1. Features

(1) Excellent thermal stability and oxidation stability.

Since THERM OIL SERIES are refined as a heat transfer fluid, it has the highest thermal stability and oxidation stability as a mineral oil-based heat transfer fluid.

(2) Excellent heat transfer.

Due to its excellent thermal stability and oxidative stability, there is little change in viscosity or the formation of sludges and carbides that hinder heat transfer, and the initial heat transfer value is maintained.

(3) Not toxic or corrosive.

THERM OIL SERIES are highly refined mineral oil that does not contain any substances harmful to the human body. Even in the event of thermal decomposition due to overheating or other unforeseen accidents, there is no risk of generating toxic or corrosive gases that could damage equipment.

(4) Especially safe due to its high average boiling point and flash point and low vapor pressure.

Since it has a high average boiling point, it can be used at low pressure. Moreover, it has a high flash point, which allows for safe operation. Also, due to its low vapor pressure, there is little evaporation loss and it does not contaminate the working atmosphere.

2. Typical properties

Property	THERM OIL							
	20	32A	34AH	46AH	68A	90A	160	500
Density 15°C g/cm ³	0.835	0.866	0.835	0.845	0.858	0.867	0.893	0.903
Flash Point (COC) °C	220	212	256	260	260	270	270	318
Pour Point °C	-12.5	-12.5	-20.0	-22.5	-15.0	-12.5	-12.5	-10.0
Kinematic Viscosity 40°C mm ² /s	20	32	34	46	68	92	160	500
Kinematic Viscosity 100°C mm ² /s	4.1	5.4	6.4	7.6	9.4	11	15	32
Acid Number mgKOH/g	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Copper Strip Corrosion 100°C,3h	1							
Color(ASTM)	L0.5	L0.5	L0.5	L0.5	L0.5	L1.0	L2.0	L4.5
Thermal Expansion Coefficient 1/°C	7.1×10 ⁻⁴							
Average Boiling Point °C	350	360	360	370	380	440	400	450

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