

Synthetic heat Transfer Oil(MTFD320)

● Performance Overview

MAXTOP synthetic heat transfer oil (MTFD320) adopts 99.9% high-purity chemical synthetic base oil, adds self-developed MAXTOP heat transfer oil composite additives, adopts multiple patented formula technologies, and is developed through multiple self-developed ultra-long-term anti-coking test technologies that are both subjected to high temperature and oxidation. Commercially available chemical synthetic heat transfer oils generally do not contain any additives. When they encounter oxygen oxidation during use, they easily become thick and gel (coke). However, the additive system developed by Maxtor will not cause these problems.



● Features

01

Excellent thermal stability, its thermal stability temperature is 20-30°C higher than transfer oil

02

The acid value and carbon increase of the synthetic heat transfer oil (MTFD320) in operation are both small

03

it will not produce sediment in the boiler system, will not coke, will not block the pipes, and will not significantly increase energy consumption

04

The energy-saving effect is remarkable, the service life is long, and if used correctly for more than 10 years.

05

Low viscosity, less running resistance, and excellent heat transfer performance

06

The metal surface is fully protected from rust and the pressure is stable during boiler system operation

07

It can be mixed with other brands of the same type of heat transfer oil and can significantly improve the anti-coking level of the original heat transfer oil

08

When a new thermal oil boiler system use synthetic heat transfer oil for the first time, it can be heated up slowly without deliberately boiling the furnace for a long time

● Application Scenario

Closed thermal oil heating system: Maximum oil film temperature 340°C, maximum main fluid temperature 320°C. If the user must use it in an open system, the temperature of the high-level tank in contact with the air must be lower than 70°C.



Typical data of Synthetic heat Transfer Oil(MTFD320)

Project	Quality indicators
Appearance	Light yellow transparent liquid
Density (20°C)/(Kg/m ³)	1010.2
Kinematic viscosity mm ² /s not more than 40°C	11.15
Kinematic viscosity mm ² /s 100°C	2.278
Kinematic viscosity mm ² /s 200°C	1.29
Kinematic viscosity mm ² /s 300°C	0.76
Flash point (open),°C	178
Flash point (closed cup),°C	163
Autoignition point,°C	452
Pour point,°C	-39
Copper strip corrosion (100°C , 3h), level	1a
Carbon residue (mass fraction), %	0.01
Acid value mgKOH/g	0.02
Initial distillation point/°C	276.5
Distillation 2%/°C	309.4
Moisture (mg/kg), %	25
Thermal stability (300°C, 720h) deterioration rate is less than	10%
320°C high temperature/70°C oxidation for 720 hours	pass
320°C high temperature/100°C oxidation for 240 hours	pass

Temperature°C	Density kg/m ³	Viscosity cSt	Thermal conductivity W/m·K	Specific heat capacity kJ/kg·K	Saturated vapor pressure psi
20	1026	62.7	0.1350	1.70	0.00
40	1001	7.2	0.1315	1.84	0.00
100	965	2.0	0.1290	2.05	0.00
200	903	0.65	0.1240	2.39	0.73
300	838	0.44	0.1180	2.73	3.89
320	824	0.42	0.1161	2.79	8.12

- The above data are typical values of current products. The data of each batch of products in the future may fluctuate within the allowable range of Maxtor quality standards.