

Mineral heat transfer oil (MTYD320)

● Performance Overview

Maxtop mineral heat transfer oil (MTYD320) is made of deeply refined saturated hydrocarbons, low sulfur and phosphorus, and less impurity mineral base oil, added with self-developed MAXTOP Maxtop heat transfer oil composite additives, using a number of patented formula technologies, and developed through a number of self-developed ultra-long-term anti-coking test technologies that are both subjected to high temperature and oxidation. Anti-coking mineral heat transfer oil has better high temperature resistance, anti-oxidation, and anti-coking performance than ordinary mineral heat transfer oil, longer service life, and lower operating costs.

● Features

01

Good thermal stability
thermal oxidation stability,
Good anti-coking properties
and thermal stability.

03

Correct use will not easily
generate deposits in the boiler
system, will not cause coking,
and will not easily clog pipes
and thermal oxidation stability

05

Good low temperature fluidity
easy for cold start.
Moderate viscosity,
small running resistance

07

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

02

The acid value and carbon
increase of the mineral heat
transfer oil (MTYD320)
during operation are both small

04

Long service life: if used correctly
for more than 8 years

06

Protect the metal surface from rust,
reduce evaporation loss and oil
replenishment, ensure stable
pressure during boiler

08

When a new thermal oil boiler
system uses mineral thermal oil for
the first time, it can be heated up
slowly without deliberately boiling
the furnace for a long time



● Application Scenario

Both closed and open thermal oil heating systems can be used: maximum oil film temperature 320°C, maximum main fluid temperature 300°C. The temperature of the high-level tank in contact with air in the open system is less than 70°C.



Typical data of Mineral heat transfer oil (MTYD320)

Project	Quality indicators
Appearance	Light yellow to Colorless transparent liquid
Density (20°C)/(Kg/m ³)	847.1
Kinematic viscosity mm ² /s not more than 40°C	21.1
Kinematic viscosity mm ² /s 100°C	4.2
Kinematic viscosity mm ² /s 200°C	1.28
Kinematic viscosity mm ² /s 300°C	0.75
Flash point (open),°C	229
Flash point (closed cup),°C	215
Autoignition point,°C	345
Pour point,°C	-33
Copper strip corrosion (100°C , 3h), level	1a
Carbon residue (mass fraction), %	0.03
Acid value mgKOH/g	0.03
Initial distillation point/°C	361
Distillation 2%/°C	351
Moisture (mg/kg), %	20
Thermal oxidation stability (175°C, 72h)	qualified
Thermal stability (300°C, 720h) deterioration rate is less than	10%
300°C high temperature/90°C oxidation for 720 hours	pass
300°C high temperature/120°C oxidation for 240 hours	pass
300°C high temperature/150°C oxidation for 144 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	878	70.2	0.1326	1.795	0.00
40	846	30.6	0.1302	1.960	0.00
100	813	5.2	0.1266	2.162	0.00
200	747	1.1	0.1195	2.493	0.40
250	714	0.7	0.1172	2.703	1.00
300	683	0.3	0.1113	2.871	3.64

- 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.