

Alkylbenzene synthetic heat transfer oil (MTHD320)

● Performance Overview

Maxtop alkylbenzene synthetic heat transfer oil (MTHD320) uses refined heavy alkylbenzene or long-chain alkylbenzene as the base oil, adds the self-developed MAXTOP heat transfer oil composite additive, adopts a number of patented formula technologies, and is developed through a number of self-developed ultra-long-term anti-coking test technologies that are both subjected to high temperature and oxidation.

● Features

01

Good low temperature fluidity self-cleaning property, thermal stability, anti-coking property

02

During operation, the acid value and carbon increase of alkylbenzene synthetic heat transfer oil are very small.

03

If used correctly, it will not produce deposits in the boiler system, will not coke, will not block the pipes, and will not increase energy consumption

04

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

05

Easy to start from cold. Moderate viscosity, small running resistance, and better thermal conductivity

06

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

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 uses alkylbenzene synthetic thermal 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.



Alkylbenzene synthetic heat transfer oil (MTHD320)

Project	Quality indicators
Appearance	Light yellow to colorless liquid
Density (20°C)/(Kg/m ³)	869.8
Kinematic viscosity mm ² /s not more than 40°C	25.73
Kinematic viscosity mm ² /s 100°C	4.418
Kinematic viscosity mm ² /s 200°C	1.26
Kinematic viscosity mm ² /s 300°C	0.73
Flash point (open),°C	216
Flash point (closed cup),°C	202
Autoignition point,°C	343
Pour point,°C	Below -55
Copper strip corrosion (100°C , 3h), level	1a
Carbon residue (mass fraction), %	0.02
Acid value mgKOH/g	0.02
Initial distillation point/°C	375
Distillation 2%/°C	361
Moisture (mg/kg), %	16
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	897.5	613	0.1339	1.749	0.00
0	885.4	192.5	0.1323	1.822	0.00
40	861.2	21.1	0.1297	1.966	0.00
200	765.3	1.1	0.1205	2.525	0.10
300	708.1	0.59	0.1121	2.886	3.56
320	696.9	0.54	0.1107	2.959	4.98

- 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.