

# Low temperature thermal oil (MTLT-115)

## ● Performance Overview

Maxtop low temperature heat transfer oil (MTLT-115) uses ultra-low pour point and high stability synthetic materials as base oil, adds self-developed MAXTOP heat transfer oil composite additives, uses multiple patented formula technologies, and is developed through multiple self-developed ultra-long-term anti-coking test technologies that are both low temperature, high temperature and oxidized. It has ultra-low low-temperature fluidity, no semi-solid or solid matter precipitates at low temperatures, smooth low-temperature fluidity, and no obvious viscosity increase at low temperatures.

## ● Features

### 01

Good low-temperature fluidity, less resistance to cold start and operation at low temperatures.

### 03

Excellent self-cleaning properties. If used correctly, it will not produce high or low temperature deposits in the system, will not form glue, will not block the heat exchanger, and will not increase energy consumption.

### 05

When operating at low temperatures, no deposits will be generated in the oil, which will not affect the heat transfer of the system.

### 02

When running at high temperatures, the product quality is stable

### 04

The energy-saving effect is remarkable, and the service life is very long.

### 06

Comprehensively protect the metal surface from rust, reduce evaporation loss and oil replenishment, and ensure stable pressure during system operation.



## ● Application Scenario

MTLT-115 is mainly used for heat transfer in low temperature working environment: the use temperature range is -100°C to 190°C, and it is better to use it in a closed system. If it is used in an open system, the interface temperature in contact with air should be less than 60°C. Under the process conditions of high temperature, low temperature and oxidation, the stability of this product is particularly outstanding.



# Typical data of low temperature thermal oil (MTLT-115)

Project	Quality indicators
Appearance	Colorless transparent liquid
Density (20°C)/(Kg/m <sup>3</sup> )	736.3
Moisture (mg/kg), %	50
Flash point (open), °C	60
Autoignition point°C	200
Pour point, not more than °C	-115
Distillation range °C	160~165.5
Acid value mgKOH/g	0.01
Carbon residue (mass fraction), %	0.01
Sulfur content mg/kg	0.57
Chlorine content mg/kg	1
Copper corrosion (100°C, 3h), level	1a
Thermal expansion coefficient (1/°C)	0.0021
Best recommended operating temperature °C	-100~190
Maximum liquid film temperature °C	205
Kinematic viscosity mm <sup>2</sup> /s 40°C	0.91
Kinematic viscosity mm <sup>2</sup> /s	21.5 (-80°C)
Low temperature pumpability/°C mm <sup>2</sup> /s	139.5 (-100°C)
The temperature without low-temperature precipitation is less than °C	-100
Thermal oxidation stability (high temperature °C*oxidation °C*time h) passed	160*60*480

● 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.

# Maxtop®