

Low temperature thermal fluid(MTLT-65)

● Performance Overview

Maxtop low temperature heat transfer fluid (MTLT-65) 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-65 products are mainly used for heat conduction in low temperature working environment: the use of temperature range -60°C to 260°C, closed use is better, if the open system use air contact interface temperature should be less than 60°C. The stability of the product is particularly outstanding under the process conditions of both high temperature and low temperature and oxidation.



Typical data of low temperature thermal fluid (MTLT-65)

| Project | Quality indicators |
|---|------------------------------|
| appearance | Colorless transparent liquid |
| Moisture (mg/kg), % | 35 |
| Flash point (opening), ° C | 75 |
| Spontaneous combustion point ° C | 248 |
| Pour point, not greater than ° C | -65 |
| Boiling range °C | 241~258 |
| Acid value mgKOH/g | 0.01 |
| Carbon residue (mass fraction), % | 0.01 |
| Sulfur content mg/kg | 0.59 |
| Chlorine content mg/kg | 1 |
| Copper corrosion (100°C,3h), grade | 1a |
| Coefficient of thermal expansion (1/°C) | 0.0013 |
| The best recommended temperature is ° C | -80~220 |
| Maximum liquid film temperature °C | 275 |
| The temperature of no low-temperature precipitates is less than °C | -70 |
| Thermal oxidation stability (high temperature °C* oxidation °C* time h) through | 240*120*480 |

| Temperature °C | Fluid density kg/m ³ | Specific heat of fluidkj/kg.k | Fluid thermal conductivityw/m.k | Kinematic viscosity of fluidmm ² /s | Vapor saturation vapor pressurekPa |
|----------------|---------------------------------|-------------------------------|---------------------------------|--|------------------------------------|
| -80 | 819 | 1.71 | 0.125 | 52.35 | |
| -60 | 805 | 1.77 | 0.122 | 19.06 | |
| -40 | 791 | 1.85 | 0.118 | 6.46 | |
| -20 | 775 | 1.95 | 1.95 | 3.56 | |
| 0 | 762 | 2.03 | 0.112 | 2.14 | 0.010 |
| 20 | 747 | 2.11 | 0.111 | 1.52 | 0.061 |
| 40 | 733 | 2.19 | 0.108 | 1.17 | 0.261 |
| 60 | 718 | 2.25 | 0.105 | 0.95 | 0.858 |
| 80 | 705 | 2.34 | 0.101 | 0.81 | 2.38 |
| 100 | 687 | 2.41 | 0.098 | 0.71 | 5.77 |
| 120 | 673 | 2.51 | 0.094 | 0.65 | 12.5 |
| 140 | 655 | 2.58 | 0.088 | 0.60 | 24.4 |
| 160 | 636 | 2.66 | 0.084 | 0.56 | 44.2 |
| 180 | 618 | 2.75 | 0.080 | 0.53 | 75.4 |
| 200 | 601 | 2.84 | 0.076 | 0.51 | 121 |
| 220 | 578 | 2.95 | 0.072 | 0.49 | 187 |