

Description

MAXFLUID Heat Transfer Oil S2 is a premium mineral oil based heat transfer fluid developed by MAXFLUID for indirect heating in closed-loop, liquid-phase circulating systems. Formulated with high-quality, highly refined base oils and advanced oxidation inhibitors, it provides outstanding thermal stability, efficient heat transfer, and long service life at high operating temperatures.

Heat Transfer Oil S2 is designed to resist thermal cracking and coke formation, keep heat transfer surfaces clean, and deliver dependable, uniform temperature control across a wide range of industrial heating applications.

Performance Features & Benefits

Excellent Thermal Stability

Heat Transfer Oil S2 offers excellent resistance to thermal cracking at high operating temperatures, minimizing carbon, sludge and light-end formation while extending oil life and reducing maintenance costs.

Outstanding Oxidation Resistance

Highly refined base oils combined with effective oxidation inhibitors protect the fluid against oxidative degradation, helping maintain low acidity and stable viscosity throughout its service life.

Efficient Heat Transfer

Low viscosity and good thermal conductivity provide fast and uniform heat transfer, helping improve process productivity and energy efficiency.

Excellent System Cleanliness

Low carbon residue and a clean formulation help prevent coke and deposit formation on heater tubes and heat exchange surfaces, improving reliability and extending equipment life.

Good Pumpability

Low viscosity and good low-temperature flow properties allow easy circulation and cold start-up, reducing pump load and energy consumption.

Low Volatility

Low vapor pressure at operating temperature minimizes fluid losses and pressure build-up in the system, supporting safe and economical operation.

Applications

MAXFLUID Heat Transfer Oil S2 is recommended for:

- Closed-loop thermal oil heating systems
- Hot oil circulation systems
- Indirect process heating
- Thermal oil boilers and heaters
- Heat exchangers
- Plastic and rubber processing machinery
- Chemical and petrochemical process heating
- Textile processing machinery
- Wood panel and laminating presses
- Asphalt and bitumen heating
- Drying ovens and dryers
- Packaging and printing machinery
- Liquid-phase systems where mineral heat transfer oils are specified

Suitable for closed-loop, liquid-phase heat transfer systems. Always follow the system manufacturer's recommendations for maximum bulk oil and film temperatures.

Performance Standards

MAXFLUID Heat Transfer Oil S2 is formulated to meet or exceed the requirements of:

- DIN 51522 (Heat Transfer Oils)
- ASTM D6743 (Thermal Stability)
- ISO 6743-12 Family Q
- DIN 4754 (Heat Transfer Systems)

Product Advantages

- Premium mineral oil based heat transfer fluid
- Excellent thermal stability
- Outstanding oxidation resistance
- High heat transfer efficiency
- Low carbon residue and coke formation
- Keeps heat transfer surfaces clean
- Good low-temperature pumpability
- Low vapor pressure and volatility
- Long service life
- Suitable for closed-loop, liquid-phase systems
- Reduces maintenance costs and downtime

TYPICAL PHYSICAL CHARACTERISTICS

PROPERTIES	UNIT	METHOD	Heat Transfer Oil S2
Appearance	-	Visual	Clear & Bright
Density @ 15°C	kg/l	ISO 12185	0.866
Kinematic Viscosity @ 40°C	cSt	ASTM D445	30.5
Kinematic Viscosity @ 100°C	cSt	ASTM D445	5.2
Viscosity Index	-	ISO 2909	98
Flash Point (COC)	°C	ISO 2592	220
Pour Point	°C	ISO 3016	-12
Max. Bulk Oil Temperature	°C	-	320
Max. Film Temperature	°C	-	340

The values shown are typical characteristics and may vary within normal manufacturing tolerances.

Health and Safety

MAXFLUID Heat Transfer Oil S2 is manufactured to high quality standards and is intended for professional industrial heating applications. Under normal operating conditions and when handled correctly, the product is not expected to present significant health or safety hazards.

Heat transfer oil operates at high temperatures. Avoid contact with hot oil and hot surfaces, which can cause severe burns. Avoid prolonged skin contact and prevent contact with eyes. Wear appropriate personal protective equipment (PPE), including heat-resistant gloves and safety glasses, when handling the product.

Store in tightly sealed containers in a cool, dry, and well-ventilated area away from direct sunlight, heat sources, and incompatible materials. Prevent spills from entering drains, waterways, or soil.

For detailed information regarding safe handling, storage, transportation, and disposal, refer to the latest Safety Data Sheet (SDS) for MAXFLUID Heat Transfer Oil S2.