



## Technical Data Sheet (TDS) — Heat Transfer Oil

**Product Name:** Basekim Heat Transfer Oil (Premium Thermal Fluid)

**Supplier:** Basekim Chemical Production Co., UAE / Turkey

---

### Product Description

Heat transfer oil is a specially formulated fluid (mineral or synthetic) designed for circulating heating systems operating under elevated temperature. It delivers efficient heat transport, resists oxidation, maintains stability, minimizes deposit formation, and protects system components. Basekim supplies heat transfer oils engineered to meet high thermal efficiency and reliability requirements. [Basekim](#)

---

### Typical Applications

- Chemical and petrochemical plants (reactors, distillation, dryers, heat exchangers) [Basekim](#)
- Food & beverage (frying, baking, processing, heating) [Basekim](#)
- Textile industry (dryers, printing, finishing) [Basekim](#)
- Plastics & rubber plants (extrusion, press heating) [Basekim](#)
- Asphalt / bitumen plants (melting, mixing systems) [Basekim](#)
- Paper, wood, veneer presses, laminators and similar equipment where stable heat is required. [Basekim](#)

---

### Key Benefits

Benefit	Operational Advantage
Wide temperature range performance	One fluid can serve for various heat requirements, reducing changeovers and inventory
Oxidation resistance	Slower fluid degradation, fewer shutdowns, lower maintenance
Low vapour pressure	Reduced risk of vaporization, safer operation, less pressure equipment needed
Thermal efficiency	Better energy transfer reduces fuel or electricity usage
Long service life	Cost savings via fewer replacements
Lower deposit formation	Cleaner heating surfaces, fewer fouling issues

---



## Typical Physical & Performance Specifications

Property	Typical Value / Range*
Density @ 15-25 °C	~0.85-0.90 g/cm <sup>3</sup>
Kinematic Viscosity @ 40 °C	e.g. ~20-100 cSt (depending on grade)
Viscosity @ 100 °C	Lower; e.g. ~5-15 cSt depending on fluid
Viscosity Index	High (to reduce viscosity change over temperature)
Flash Point (Closed Cup)	Approx. ≥ 200 °C (or as per specification)
Pour Point	–10 to –20 °C (or better depending on ambient conditions)
Maximum Operating Temperature	Insert your rated maximum continuous temperature (e.g. 320-350 °C or more for synthetic)
Thermal Stability / Decomposition Temperature	Temperature at which fluid begins to degrade (coking, oxidation)
Volatility / Vapor Pressure	Low at operating temperatures
Ash Content / Residue on Distillation	Low residues to minimize fouling and deposits
Corrosion Protection	Meets corrosion test standards (copper, steel, etc.)

*These figures are typical examples. Actual values must be confirmed by lab / COA for each batch.*

## Product Variants / Grade Types

Possible heat transfer oil types you may offer (or consider):

- Mineral base thermal oils (standard grade)
- High temperature synthetic oils
- Food-grade thermal fluids (if required)
- Low vapor pressure fluids for sealed systems
- Blends for extended life or improved resistance

## Packaging & Supply

- 20 L cans (for pilot systems, trials, small users)
- 200 L steel drums (industrial scale)
- IBC tanks / flexitanks / bulk (large plants)
- Each batch supplied with COA, TDS, and MSDS as per Basekim's documentation policy. [Basekim](https://www.basekim.com)



---

## Storage & Handling Recommendations

- Store in clean, dry, well-ventilated warehouse, away from direct sunlight and sources of heat.
- Containers must be sealed to prevent contamination and oxidation.
- Prevent water ingress—moisture degrades performance.
- Avoid high temperature exposure outside operating / storage specs.

---

## Maintenance & Fluid Replacement Guidelines

- Periodically monitor fluid parameters: viscosity, acid / oxidation products (e.g. TAN or an equivalent), residue / deposits, color / clarity.
- Replace fluid when performance falls below acceptable thresholds (e.g. when deposit formation or oxidation increases, fluid darkens, higher corrosivity, etc.).
- Follow manufacturer or system OEM guidelines for top-ups or complete change.