

# Ocean Thermic Fluid 32

High Performance Heat Transfer Oils



## Product Data Sheet

---

### Product Description

Ocean Thermic Fluid 32 is high performance heat transfer oil formulated with highly refined Group II base stocks, intended for use in closed and indirect heating installations. They provide exceptional resistance to thermal cracking and chemical oxidation, thus flash point of these oils will not decrease significantly in service. Moreover, they are thermally stable and are capable of an extremely long service oil life, without deposit formation or increase in viscosity.

### Features & Benefits

- Outstanding thermal & oxidation stability prevents coke, varnish & sludge formation and helps in extending life of oil.
- Good low temperature fluidity, facilitates easy starting of cold systems
- Excellent anti-foaming characteristics, avoids pump cavitation and erratic operations.
- High heat transfer rates and improved operating efficiency promotes low cost of operation.
- Excellent protection from rust and corrosion of multi-metallurgy heat exchangers.

### Application

- Ocean Thermic Fluid 32 can be used in open and closed installations where the bulk oil temperature ranges are outlined as below and where minimum shutdown temperatures are not below -12°C.
- Bulk Oil Temperature Ranges for Closed Systems (-12°C to 320°C) & Open Systems (-12°C to 180°C).
- Suitable for Closed, cold-oil sealed, indirect heating and cooling systems in all kinds of industrial processes operating at bulk oil temperatures up to the maximum temperatures as stated above and at atmospheric pressures.
- Suitable for Open systems, provided the bulk oil temperatures do not exceed the maximum temperatures as stated above.

### Typical Characteristics

| Ocean Thermic Fluid         | Test Method | Units | 32         |
|-----------------------------|-------------|-------|------------|
| ISO Viscosity Grade         | ISO 3448    | -     | 32         |
| Density @ 15 °C             | ASTM D 4052 | gm/cc | 0.860      |
| Viscosity @ 40 °C           | ASTM D 445  | cSt   | 30.0       |
| Viscosity @ 100 °C          | ASTM D 445  | cSt   | 5.25       |
| Viscosity Index             | ASTM D 2270 | -     | 106        |
| Pour Point                  | ASTM D 97   | °C    | -12        |
| Flash Point (COC)           | ASTM D 92   | °C    | 224        |
| Fire Point (COC)            | ASTM D92    | °C    | 255        |
| Micro-Conradson Residue     | ASTM D 4530 | %wt   | 0.05 (max) |
| Copper Strip Corrosion      | ASTM D 130  | -     | 1B         |
| Rust Characteristics Proc B | ASTM D 665  | -     | Pass       |
| Foam Seq I,II,III           | ASTM D 892  | ml/ml | 10/0       |

*The above figures are typical of blends with normal production tolerance and do not constitute a specification.*

---

---

| <b>Ocean Thermic Fluid</b>       | <b>Test Method</b> | <b>Units</b> | <b>32</b> |
|----------------------------------|--------------------|--------------|-----------|
| Total Acid Number                | ASTM D974          | mgKOH/g      | <0.05     |
| Initial Boiling Point            | ISO 3771           | °C           | >355      |
| Auto Ignition Temperature        | DIN 51794          | °C           | >360      |
| Max. Film Temperature            | --                 | °C           | 340       |
| Max. Bulk Temperature            | --                 | °C           | 320       |
| Coefficient of Thermal Expansion | --                 | 1/°C         | 0.0008    |

---