



R K PETROLEUMS

Where Quality Comes First



HEAT TRANSFER FLUID

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ARKO THERM 500/600

ARKO Therm 500 and 600 are heat transfer fluids formulated using highly refined paraffinic oils with high viscosity index. These oils possess exceptional oxidation stability, high thermal conductivity and adequate specific heat to facilitate effective heat transfer.

Mineral oils are generally preferred for use in heat transfer systems operating with temperatures ranging from 270 °C to 310 °C. In the operation, the heat transfer fluid is pumped to the tube furnace, gets heated and this hot oil is then passed through the process vessels from where it is conveyed back to the pump. An expansion tank of suitable design is connected to the suction side of the pump to take care of the variation in the volume. ARKO Heat Transfer Fluids have the correct viscosity; hence they are able to yield optimum heat transfer rates from well-designed systems.

Applications:

ARKO Therm 500 is recommended for use in heat transfer systems operating with bulk oil temperature up to 280 °C. ARKO Therm 600 provides superior performance due to its low Sulphur content and CCR value and is recommended for operating at temperature up to 300 °C. ARKO heat transfer fluids also function as lubricants for circulating pumps.

Advantages:

The properties of ARKO Therm heat transfer fluids 500 and 600 include low volatility and the absence of high pressure, which facilitates efficient compact units and associated space savings. Due to high boiling point they can be used without pressurization at maximum bulk temperature. These oils also generate the least amount of oxidation by-products and reduce oil change periods. There is also lower evaporation loss, and consequently a smaller difference to make up for, in oil volumes. Their low viscosity and excellent pumpability ensure lower power consumption.

Typical properties:

| Sr. No. | Characteristics | Test Method | ARKO Therm | |
|---------|---|-------------|------------------|------------------|
| | | | 500 | 600 |
| 1 | Appearance | Visual | Bright and clear | Bright and clear |
| 2 | Colour, max. | ASTM D 1500 | <1 | <1 |
| 3 | Flash point (COC), °C, min. | ASTM D 92 | 200 | 220 |
| 4 | Kinematic viscosity at 40°C, cSt, min. | ASTM D 445 | 30 | 35 |
| 5 | Viscosity index min. | ASTM D 2270 | 95 | 100 |
| 6 | Pour point °C, max. | ASTM D 97 | -9 | -15 |
| 7 | Ignition temperature °C | — | >350 | >350 |
| 8 | Initial boiling point °C | ASTM D 1160 | 350 | 363 |
| 9 | Final boiling point °C | ASTM D 1160 | 440 | 442 |
| 10 | CCR wt% | — | <0.02 | <0.02 |

PACKING: 20ltr, 35ltr, 50ltr, 210ltr

The above properties are typical values and do not constitute specification of the product.

Disclaimer: R K EPTROLEUMS makes no warranties, representation or conditions of any kind expressed or implied for use with respect to these products. Final determination of suitability of the product for the application contemplated by the users is solely their responsibility.

ARKO THERM 740

ARKO Therm 740 is a synthetic type heat transfer fluid processed from synthetic base oil and select additives that enhance performance. It can be used in thermic fluid systems up to maximum temperature of 310°C to 320°C.

Applications:

ARKO Therm 740 heat transfer fluid is used in a wide variety of industrial heating system applications such as natural gas purification, plastics moulding process, pharmaceuticals, chemicals processing, biodiesel production and textile manufacture. It is specially recommended for use in heat transfer systems operating with bulk oil temperature up to 320°C.

Advantages:

ARKO Therm 740 heat transfer fluid generates the least amount of oxidation by-products. Regular usage of this thermic fluid reduces evaporation losses, and consequently there is a smaller variation to make up for, in oil volumes. It keeps the system clean and also reduces oil consumption and oil change frequency. Its low viscosity and excellent pumpability help reduce power consumption.

Typical properties:

| Sr. No. | Characteristics | Test Method | ARKO Therm 740 |
|---------|--|-------------|------------------|
| 1 | Appearance | Visual | Bright and clear |
| 2 | Colour, max. | ASTM D 1500 | 1.0 |
| 3 | Kinematic viscosity at 40°C, cSt, min. | ASTM D 445 | 33 – 38 |
| 4 | Kinematic viscosity at 100°C, cSt, min. | ASTM D 94 | 6 – 10 |
| 5 | Viscosity index, min. | ASTM D 2270 | 130 |
| 6 | Flash point °C, min. | ASTM D 92 | 225 |
| 7 | Pour point, °C, max. | ASTM D 97 | -12 |
| 8 | TAN, mg KOH/g | — | 0.1 |
| 9 | Ignition temperature °C | — | 350 |
| 10 | Initial boiling point °C | ASTM D 1160 | 340 |
| 11 | Final boiling point °C | ASTM D 1160 | 399 |
| 12 | Coefficient of thermal expansion | — | 0.00092 |

PACKING: 20ltr, 35ltr, 50ltr, 210ltr

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ARKO THERM T

ARKO Therm T is a special heat transfer fluid processed from highly refined paraffinic oils with high viscosity index. The blend possesses exceptional oxidation stability, high thermal conductivity and adequate specific heat to facilitate effective heat transfer. Mineral oils are generally preferred for use in heat transfer systems operating up to a bulk temperature of 300°C. These systems are sodesigned that the heat transfer fluid is pumped to the tube furnace, gets heated and this hot oil is then passed through the process vessels from where it is conveyed back to the pump. An expansion tank of suitable design is connected to the suction side of the pump to take care of the variation in the volume.

Applications:

ARKO Therm T is recommended for use in heat transfer systems operating with bulk oil temperature up to 300 °C. It is also suitable for direct and secondary heating in conventional heat transfer operations in textile, pharmaceutical, chemical and processing industries. It also functions as a lubricant for circulating pumps. Having correct viscosity, ARKO Therm T is able to yield optimum heat transfer rates from well designed systems.

Standards:

ARKO Therm T heat transfer fluid meets the performance standards of IS:14745:1999 (Reaffirmed 2004).

Advantages:

Usage of ARKO Therm T heat transfer fluid results in lower evaporation losses, and consequently a smaller difference to make up for in oil volumes. It also leads to fewer oil change intervals and generates very little oxidation by-products during its operational life. Its low viscosity and excellent pumpability ensures lower power consumption.

Typical properties:

| Sr. No. | Characteristics | Test Method | ARKO Therm T |
|---------|---|-------------|------------------|
| 1 | Appearance | Visual | Bright and clear |
| 2 | Kinematic viscosity at 40 °C, min. | ASTM D 445 | 30 |
| 3 | Kinematic viscosity at 100 °C, cSt, min. | ASTM D 94 | 5 |
| 4 | Flash point, COC, °C, min. | ASTM D 92 | 220 |
| 5 | Pour point, °C, max. | ASTM D 97 | |
| 6 | Viscosity index, min. | ASTM D 2270 | 119 |
| 7 | Copper corrosion, 100 °C, 3 hrs | ASTM D 130 | 1A |
| 8 | Initial boiling point °C | ASTM D 1160 | 380 |
| 9 | Final boiling point °C | ASTM D 1160 | 480 |
| 10 | Neutralisation value, mg KOH/g | ASTM D 664 | <0.2 |
| 11 | Coefficient of thermal expansion | — | 0.00080 |
| 12 | Thermal conductivity @ 29.5 °C cal/cm.s °C | — | 0.000321 |

PACKING: 20ltr, 35ltr, 50ltr, 210ltr

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- ❖ CUTTING OILS
- ❖ MACHINE OILS
- ❖ SILICONE EMULSION
- ❖ GREASES
- ❖ GEAR OILS

TRADERS & MARKETERS OF:-

- ❖ LUBRICATING OILS
- ❖ L.D.O & FURNACE OIL
- ❖ RUBBER PROCESS OILS
- ❖ BASE OILS
- ❖ PETROLEUM JELLY
- ❖ WAXES
- ❖ INDUSTRIAL SOLVENTS
- ❖ PLASTISIZERS
- ❖ ALL TYPES OF RAW RUBBER

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