

## Proven performance industrial heat transfer oil

### Product description

Texatherm is a proven performance industrial heat transfer oil formulated for use in both closed and open heat transfer systems with forced circulation.

### Customer benefits and product features

#### Customer benefits

- Offers energy efficient heat transfer performance, helping to keep costs down
- Thermal stability promotes longer-life keep-clean system performance and assists with sludge and coke deposit resistance
- Low temperature fluidity aids cold system start-up, rapid fluid circulation and operation
- Low vapour pressure at elevated temperatures helps minimise evaporation, vapour lock and pump cavitation
- Promotes efficient operation at lower system pressures, avoiding the need for expensive high pressure piping and heat exchangers

### Applications

- May be used in heat transfer systems in industrial drying applications, rubber and plastics manufacture, heating of asphalt and fuel oil tanks, factory heating, manufacture of soap, resin, glue, dyes, paints and grease, wood laminate, fibre board and veneer manufacture, agricultural heating and drying, and chemical, petroleum and wax processing
- Suitable for use in open systems operating at temperatures up to +200°C
- Suitable for use in closed systems (sealed with cold oil or inert gas) operating at bulk oil temperatures up to +320°C
- For longer trouble-free service in closed systems, the maximum film temperature on heater surfaces should be limited to +340°C
- Systems must have forced heat transfer fluid circulation
- While unused Texatherm is compatible with most organic heat transfer oils, Chevron recommends conducting prior laboratory testing before the product is added as a top-up to a system containing a different used oil. Adding Texatherm as make up to severely used oil, especially aromatic types, may precipitate suspended sludge.

### Product approvals, performance and recommendations

**Performance:** Developed independently by Chevron to comply with the following specifications:

- DIN 51522 -Q
- ISO 6743-12 Family Q

### Typical test data

| TEXATHERM KEY PROPERTIES                                 | TEST METHODS | RESULTS   |           |
|--|--------------|-----------|-----------|
| <b>Viscosity Grade</b>                                   |              | <b>32</b> | <b>46</b> |
| Permitted Film Temperature, °C (Skin)                    |              | 343       | 316       |
| Permitted Initial Temperature (Bulk)                     |              | 316       | 288       |
| Appearance   |              | Br&Cl     | Br&Cl     |
| Kinematic viscosity, 40°C, mm <sup>2</sup> /s            | ASTM D445    | 30.65     | 45.66     |
| Kinematic viscosity, 100°C, mm <sup>2</sup> /s           | ASTM D445    | 5.363     | 7.02      |
| Viscosity Index  | ASTM D 2270  | 109       | 111       |
| TAN, mgKOH/g   | ASTM D974    | 0.01      | 0         |
| Flash point COC, °C                                      | ASTM D92     | 234       | 238       |
| Flash Point, PMCC  | ASTM D93     | 198       | 208       |
| Density at 15°C, kg/l                                    |              | 0.8588    | 0.8613    |
| Copper corrosion (3 h, 100 °C)                           | ASTM D130    | 1A        | 1A        |
| Ash oxide, %   | ASTM D482    | <0.005    | <0.005    |
| Carbon residue, %  | ASTM D189    | 0.01      | 0.01      |
| Thermal stability, 500hrs at 320°C                       | ASTM D6743   |           |           |
| Initial boiling point of thermally stressed fluid, °C    |              | 134       | 137       |
| Final Boiling Point of Thermally Stressed Fluid, °C      |              | 550       | 558       |
| Initial Boiling Point of Unstressed Fluid, °C            |              | 338       | 254       |
| Final Boiling Point of Unstressed Fluid, °C              |              | 552       | 558       |
| Gaseous Decomposition Products, mass%                    |              | 0.9       | 0.4       |
| Low Boiling Components, mass%                            |              | 4.0       | 1.0       |
| High Boiling Components, mass%                           |              | 0         | 0         |
| Decomposition Products that cannot vaporized, mass%      |              | 44.6      | 88.2      |
| Decomposition Products remaining in the test cell, mass% |              | 1.0       | 1.0       |
| Total Low Boiling Decomposition Products, mass%          |              | 4.9       | 1.4       |
| Total High Decomposition Products, mass%                 |              | 45.6      | 89.2      |

### Typical test data

| TEXATHERM KEY PROPERTIES      | TEST METHODS | RESULTS                                |  |
|-------------------------------|--------------|--|--|
| <b>Specific heat capacity</b> | <b>DSC</b>   |  |  |
| At 25°C, kJ/kgK               |              |  |  |
| At 100°C, kJ/kgK              |              | 2.3050                                 | 2.305                                  |
| At 175°C, kJ/kgK              |              | 2.5740                                 | 2.574                                  |
| At 200°C, kJ/kgK              |              | Exothermic excursion occurred at 208°C | Exothermic excursion occurred at 208°C |
| <b>Thermal Conductivity</b>   |              |  |  |
| At 25°C, W/mK                 |              | 0.141                                  | 0.141                                  |
| At 40°C, W/mK                 |              | 0.14                                   | 0.14                                   |
| At 100°C, W/mK                |              | 0.137                                  | 0.137                                  |
| At 150°C, W/mK                |              | 0.134                                  | 0.134                                  |

This bulletin was prepared in good faith from the best information available at the time of issue. While the values and characteristics are considered representative, some variation, not affecting performance, can be expected. It is the responsibility of the user to ensure that the products are used in the applications for which they are intended. Produced by Chevron Global Lubricants: Asia Pacific.

ENVIRONMENT, HEALTH and SAFETY. Information is available on this product in the Material Safety Data Sheet (MSDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain a MSDS for this product, visit the [Product Information Center](#).

This Product Data Sheet (PDS) was produced for the Asia Pacific region based on the best available information at the time of issue. The specific information included may not directly reflect the market or conditions, and may vary. For the most up-to-date, country-specific information, please contact your local customer service center.