

technical data sheet

Optima Series

Industrial Closed Gear Box Oils

PRODUCT DESCRIPTION

Optima Series, is a high performance industrial gear oils developed for closed gear boxes under extreme operating conditions. It is formulated with quality base oils and specially developed additive package.

APPLICATIONS

• It is suitable to use in closed gear boxes under extreme operating conditions.

CHARACTERISTICS

- Its extreme pressure (EP) additive provides effective protection for industrial gears operating under high loads.
- Its high quality formulation ensures good demulsibility property.
- It controls sludge and deposit formation, so keeps system clean.
- It provides excellent protection against wear, rust and corrosion to increase operating efficiency of the gears and bearings.

PERFORMANCES

- AGMA 9005-E02
- AIST 224
- DIN 51517 Part 3

TYPICAL PROPERTIES

| SAE | | 68 | 100 | 150 | 220 | 320 | 460 | 680 |
|-------------------------|-------------|-------|-------|-------|-------|-------|-------|-------|
| Density@15°C, g/ml | ASTM D 4052 | 0,886 | 0,890 | 0,890 | 0,900 | 0,900 | 0,909 | 0,907 |
| Viscosity@40°C, mm²/s | ASTM D 445 | 68,0 | 100,0 | 150,0 | 220,0 | 320,0 | 460,0 | 680,0 |
| Viscosity@100°C, mm²/s | ASTM D 445 | 8,7 | 11,3 | 14,5 | 18,4 | 24,0 | 29,3 | 45,4 |
| Viscosity Index | ASTM D 2270 | 99 | 98 | 95 | 92 | 95 | 91 | 113 |
| Flash Point, °C | ASTM D 92 | 236 | 250 | 250 | 260 | 255 | 270 | 270 |
| Pour Point,°C | ASTM D 97 | -24 | -24 | -24 | -24 | -14 | -12 | -10 |
| Timken OK Load, ıbs | ASTM D 2782 | 85 | 95 | 95 | 95 | 95 | 95 | 95 |
| 4-ball Welding Load, kg | ASTM D 2783 | ≥250 | ≥250 | ≥250 | ≥250 | ≥250 | ≥250 | ≥250 |

OPET.TDS.1500-6/Rev.05/28.07.2015



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HEALTH AND SAFETY RECOMMENDATIONS

Waste oils must not be discharged into underground or surface water sources, sewage systems or garbage cans. Prolonged or repeated contact with used oils may cause skin diseases. Therefore sterilized gloves should always be used. If part of the skin comes into contact with waste oil, that part should be immediately washed with plenty of soap and water. In case of skin irritation or redness caused by contact, seek advice of your doctor immediately. For more information contact Material Safety Data Sheet (MSDS).

The vehicle and equipment manufacturers spesifications and relevant international standards were taken into consideration while preparing the content of this Technical Data Sheet. The expressions in the content of this Technical Data Sheet can not be considered as guarantee commitment or similar way in terms of product characteristics and product use in any applications.

The correct use of this product, compliance with applicable laws and regulations is responsibility of the user. Opet Fuchs Madeni Yağ. San. ve Tic. A.Ş. can not be held responsible for any loss or damage arising from the abnormal use and misuse or any hazards of product content and its results.

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