MOL Ultrans Synt 680 WS

synthetic industrial gear oil



Version: 003.008.006

MOL Ultrans Synt 680 WS is a polyalkylene glycol (PAG) based premium quality industrial gear oil having additives with balanced composition and ensuring high performance, which provides a degree of protection for the drive gears well beyond that provided by conventional mineral oil based lubricants. Its application is accompanied by a potential energy saving. It is soluble in water, it is free from chlorine, lead and sulphur. Due to its high thermal stability it can be used at temperatures exceeding 200 °C. It cannot be blended with mineral oil or hydrocarbon based synthetic oils! It is compatible with the most often used sealing materials. In case of particularly high temperatures, it is recommended to use nitrile rubber (NBR), fluor-silicone or vinyl-methyl polysiloxane (Q) sealing materials. Polyurethane sealing materials should be avoided. The usual industrial paint coatings become soft upon contact with the product. Ideally, the internal surface of the drive gear is not painted, or is coated with resistant material, e.g. two layers of epoxy coating.

Application









Industrial gear drives operating under arduous conditions (high loads, low speeds)

Enclosed industrial gear drives working at permanently high operating temperatures

Gear drives exposed to shock loads

Bearings operating at high temperatures

Worm gears

Lubrication of reciprocating and screw compressors, chains, conveyors, kilns

Features and benefits

Excellent load-carrying properties

No lubricating film disruption even under shock loads, giving protection against seizure

Exceptional thermal and oxidation stability

Increased oil drain intervals; three times longer drain periods are achievable compared to conventional lubricants, depending on the operating conditions

Operational, maintenance and disposal costs are reduced Increased operational safety, availability and lifetime of equipment

Low coefficient of friction

Good efficiency and low energy consumption

Excellent protection against micropitting

Long gear lifetime, giving reliable operation High load-carying ability, giving long gear lifetimes

Excellent cold flow properties

Reliable operation even at low temperatures

Specifications and approvals

Viscosity grade: ISO VG 680 DIN 51502 PG-CLP David Brown Type G Flender (Siemens)

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Properties

| Properties | Typical values |
|---------------------------------------|----------------|
| Density at 15°C [g/cm3] | 1.072 |
| Kinematic viscosity at 40°C [mm2/s] | 725 |
| Kinematic viscosity at 100 °C [mm2/s] | 122 |
| Viscosity index | 272 |
| Pour point [°C] | -33 |
| Flash point (Cleveland) [°C] | 287 |
| Antiwear properties (FZG) | |
| - failure load stage | >12 |

The characteristics in table are typical values of the product and do not constitute a specification.

Storage and handling instructions

Store in the original container in dry, properly ventilated area. Keep away from direct flame and other sources of ignition. Protect from direct sunlight.

During transport, storage and use of the product follow the work safety instructions and environmental regulations relating to mineral oil products.

For further details please read the Material Safety Data Sheet of the product. In the original container under the recommended storage conditions: 60 months

Recommended storage temperature: max. 40°C