Klübersynth GHE 6

Synthetic gear and circulating oils

Your benefits at a glance

- Klübersynth GHE 6 oils offer much longer service life than mineral oils due to the excellent ageing and oxidation resistance of the synthetic base oil; thus maintenance intervals can be extended and in certain cases even lifetime lubrication is possible.
- Its high scuffing load resistance offers good scuffing protection even at high peak loads.
- The good wear protection of both gears and rolling bearings prevents premature component failure, leading to lower maintenance and repair costs.
- The optimum friction behaviour of the polyglycol base oil reduces power losses and improves efficiency.
- The excellent viscosity-temperature behaviour supports the formation of a separating lubricating film even at elevated temperatures.
- Seals made of 72 NBR 902, 75 FKM 585 and 75 FKM 170055 are resistant to Klübersynth GHE 6 oils. Leakage and contamination are prevented.
- Approved by Flottweg Separation Technology.

Your requirements - our solution

Klübersynth GHE 6 oils are polyglycol-based gear and circulating oils particularly resistant to ageing and oxidation offering high scuffing load capacity.

Owing to their polyglycol base oil, Klübersynth GHE 6 oils have a good viscosity-temperature and excellent high-temperature behaviour.

Application

Klübersynth GHE 6 oils were specially developed for the lubrication of spur, bevel, planetary and worm gears.

Klübersynth GHE 6 oils are also used for the lubrication of rolling and plain bearings as well as all kinds of toothed couplings.

Application notes

Klübersynth GHE 6 oils can be applied by immersion, immersion/circulation and injection.

Klübersynth GHE 6 oils are not miscible with mineral oils and synthetic hydrocarbons. Prior to switchover, lubrication points should be cleaned, or gears or enclosed systems be flushed with Klübersynth GHE 6.

Klübersynth GHE 6 oils are neutral towards virtually all nonferrous metals.

There may be increased wear when the contact surfaces of design elements made of aluminium or aluminium alloys are exposed to dynamic loads. If necessary, preliminary tests should be carried out.

For use at permanent temperatures of 80 °C max., seals made of 72 NBR 902 may be used. For higher temperatures, seals made of 75 FKM 585 or 75 FKM 170055 should be chosen.

It should be noted that elastomers from one or several manufacturers can behave differently; therefore tests should be performed.

When applying Klübersynth GHE 6 oils we recommend the use of two-component paints (reaction paints) for interior coating. Oil gauge glasses should preferably be made of natural glass or polyamide materials. Other transparent plastics, e.g. Plexiglas, have a tendency to crack under stress.

The suitability of materials used in contact with Klübersynth GHE 6 oils should be tested, especially prior to series application.

Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

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Pack sizes	Klübersynth GHE 6-100	Klübersynth GHE 6-460
Canister 5 l	+	
Canister 20 l	+	+
Drum 200 l	+	+

Characteristics	Klübersynth GHE 6-100	Klübersynth GHE 6-460
Article number	012278	012313
Service temperature, lower limit	-35 °C	-30 °C
Service temperature, upper limit	160 °C	160 °C
Density, DIN 51757, 15°C	1043 kg/m³	approx. 1077 kg/m³
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 250 °C	≥ 280 °C
Foam test, ISO 6247 / ASTM D892, 24°C, sequence I	≤ 100/10 ml	≤ 100/10 ml
Foam test, ISO 6247 / ASTM D892, 24°C, sequence III	≤ 100/10 ml	≤ 100/10 ml
Foam test, ISO 6247 / ASTM D892, 93.5°C, sequence II	≤ 100/10 ml	≤ 100/10 ml
ISO viscosity grade, DIN ISO 3448, ISO VG	100	460
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 20 mm²/s	approx. 73 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 20°C	approx. 270 mm²/s	approx. 1270 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 100 mm²/s	approx. 460 mm²/s
Viscosity index, DIN ISO 2909	≥ 190	≥ 230
Copper corrosion, DIN EN ISO 2160, 24 h, 100°C	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree
Steel corrosion, DIN ISO 7120 / ASTM D665, method A, 24 h, 60°C	rust-free	rust-free
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	≤ -40 °C	≤ -35 °C
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of cage	≤ 200 mg	≤ 200 mg
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of rolling elements	≤ 30 mg	≤ 30 mg
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	≥ 14	≥ 14
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months

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Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 95 years.

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