

# Klübersynth GHE 6

Synthetic gear and circulating oils



#### Benefits for your application

- 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.

#### Description

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.





## Klübersynth GHE 6

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

Product data	Klübersynth GHE 6-100	Klübersynth GHE 6-460
Article number	012278	012313
Lower service temperature	-35 °C / -31 °F	-30 °C / -22 °F
Upper service temperature	160 °C / 320 °F	160 °C / 320 °F
Density, based on DIN 51757) at 15 °C	1 043 kg/m³	approx. 1 077 kg/m <sup>3</sup>
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 20 °C	approx. 270 mm <sup>2</sup> /s	approx. 1 270 mm <sup>2</sup> /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 100 mm <sup>2</sup> /s	approx. 460 mm <sup>2</sup> /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 20 mm <sup>2</sup> /s	approx. 73 mm <sup>2</sup> /s
ISO viscosity grade, DIN ISO 3448	100	460
Viscosity index, DIN ISO 2909	>= 190	>= 230
FZG scuffing test, DIN ISO 14635-1, A/8.3/90, scuffing load stage	>= 14	>= 14
FAG FE8 rolling bearing test, DIN 51819-3, D 7,5/80-80, wear of rolling element	<= 30 mg	<= 30 mg
FAG FE8 rolling bearing test, DIN 51819-3, D 7,5/80-80, wear of cage	<= 200 mg	<= 200 mg
Anticorrosive properties on steel, DIN ISO 7120, method A, steel, 24 h/60 °C	no rust corrosion degree	no rust corrosion degree
Copper corrosion, DIN EN ISO 2160, 24 h/100°C	1 - 100 corrosion degree	1 - 100 corrosion degree
Pour point, DIN ISO 3016	<= -40 °C	<= -35 °C
Foam test, ASTM-D 892, ISO 6247, sequence I/24 °C	<= 100/10 ml	<= 100/10 ml
Foam test, ASTM-D 892, ISO 6247, sequence II/ 93.5 °C	<= 100/10 ml	<= 100/10 ml
Foam test, ASTM D 892, ISO 6247, sequence III/24°C	<= 100/10 ml	<= 100/10 ml
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	>= 250 °C	>= 280 °C

#### 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 80 years. Klüber Lubrication München SE & Co. KG / Geisenhausenerstraße 7 / 81379 München / Germany / phone +49 89 7876-0 / fax +49 89 7876-333.

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