Klübersynth G 4

Synthetic high-performance gear oil

Your benefits at a glance

- **Sufficient scuffing protection**
- **Good wear protection**
- **Excellent ageing and oxidation resistance**
- **Wide service temperature range due to good viscosity-temperature behaviour**
- **Low foaming tendency**
- **Energy savings due to optimised friction behaviour**
- **Very good protection of nonferrous metals**

Your requirements – our solution

Klübersynth G 4 is a synthetic high-performance gear oil based on polyalphaolefin and selected additives.

Klübersynth G 4 shows high scuffing strength. Gears are sufficiently protected against scuffing even at extremely high peak loads, vibrations or oscillations. The good wear protection of the gear components ensures that their calculated service life is achieved, leading to lower maintenance and repair costs.

Klübersynth G 4 offers a much longer service life than mineral oils due to its excellent ageing and oxidation resistance; thus service intervals can be extended and maintenance costs reduced. The product's low foaming tendency and anti-corrosive properties enable problem-free gear operation. Klübersynth G 4 is neutral towards most sealing materials such as NBR or FKM. Oil leakage leading to contamination is prevented. Due to the product's good compatibility with brass, bronze and copper, it may be used for the lubrication of applications where the corrosion of nonferrous metals is an issue.

The good viscosity-temperature behaviour supports the formation of a sufficient lubricant film across a wide service temperature range. Therefore, a single viscosity grade can cover both low and high temperatures in many applications.

The optimised friction behaviour enabled by the carefully selected base oils reduces power loss and improves gear efficiency.

Klübersynth G 4 is recommended and approved for ITEMA / Somet weaving machines and Stäubli gearboxes.

By using Klübersynth G 4 you can benefit from a number of advantages that will help you save costs easily and efficiently. We look forward to hearing from you.

Application

Klübersynth G 4 was especially developed for the lubrication of spur, bevel and planetary gears. It can also be used for plain and rolling bearings.

Application notes

Klübersynth G 4 can be used for immersion, immersion circulation and injection lubrication.

The use of drip-feed oilers, brushes, oil cans or suitable automatic lubricating systems is also possible. When using automatic lubricating systems, please note the manufacturer's instructions regarding the maximum permissible viscosity. The low-viscosity varieties are also used for oil mist lubrication.

Klübersynth G 4 is miscible with mineral oils. However, for the Klübersynth G 4 oil to deliver its full performance, any residues of a previously used mineral oil should not exceed 5 % in quantity.

For use at permanent temperatures of 80 °C max., seals made of NBR may be used. For higher temperatures, seals made of FKM should be chosen. It should be noted that elastomers from one or several manufacturers can behave differently; therefore tests should be performed.

For checking the contact pattern during running-in, the inspection paint Klübertop P 39-462 Spray (Art. No. 081295) can be used.

Viscosity selection

When determining the oil viscosity for gear lubrication, the gear manufacturer's instructions take priority. To determine the correct oil viscosity for bearings, please observe the bearing manufacturer's instructions.

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Due to the better viscosity-temperature behaviour of Klübersynth G 4, its actual viscosity during operation differs from that of mineral oils and can be determined by means of the enclosed diagram.

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.

Pack sizes	Klübersynth G 4- 68	Klübersynth G 4-130	Klübersynth G 4-150	Klübersynth G 4-220
Canister 19 l	+	+	+	+
Drum 208 l	+	+	+	+

Product data	Klübersynth G 4- 68	Klübersynth G 4-130	Klübersynth G 4-150	Klübersynth G 4-220
Article number	012186	012024	012285	012301
Lower service temperature	-40 °C / -40 °F	-40 °C / -40 °F	-40 °C / -40 °F	-40 °C / -40 °F
Upper service temperature	140 °C / 284 °F	140 °C / 284 °F	140 °C / 284 °F	140 °C / 284 °F
Colour space	yellow	yellow	yellow	yellow
Density, DIN 51757, 20 °C	approx. 0.86 g/cm³	approx. 0.86 g/cm³	approx. 0.86 g/cm³	approx. 0.87 g/cm³
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ ASTM D 7042, 40 °C	approx. 68 mm²/s	approx. 130 mm²/s	approx. 150 mm²/s	approx. 220 mm²/s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ ASTM D 7042, 100 °C	approx. 10 mm²/s	approx. 17 mm²/s	approx. 19 mm²/s	approx. 26 mm²/s
Viscosity index, DIN ISO 2909	approx. 140	>= 130	>= 130	>= 140
Copper corrosion, DIN EN ISO 2160, 24 h/100°C	1 - 100 corrosion degree	1 - 100 corrosion degree	1 - 100 corrosion degree	1 - 100 corrosion degree
Pour point, DIN ISO 3016	<= -40 °C	<= -40 °C	<= -40 °C	<= -40 °C
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	>= 200 °C	>= 200 °C	>= 200 °C	>= 230 °C
FZG scuffing test, DIN ISO 14635-1, A/8.3/90, scuffing load stage	>= 12	>= 12	>= 12	>= 12
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	36 months	36 months

Product information

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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 80 years.

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