

# Klübersynth GE 4 75 W 90

Synthetic high-performance gear oil



## Your benefits at a glance

- Highest scuffing load capacity API GL-5
- Excellent wear protection of both gears and rolling bearings
- Good shear stability for reliable lubricating film formation
- High micropitting resistance
- Excellent ageing and oxidation resistance
- Wide service temperature range due to good viscosity-temperature behaviour
- Good anti-foam properties
- Particularly suitable for rail vehicle gears - approved by Wateeuw, Voith Turbo, Siemens-Flender, Bombardier, Deutsche Bahn AG, Stadler and many more

## Your requirements - our solution

Klübersynth GE 4 75 W 90 is a fully synthetic high-performance gear oil based on polyalphaolefin (PAO), which offers high shear stability and protection, even when exposed to impact load. It is particularly suitable for rail vehicle gears subject to high loads.

This high-performance gear oil offers a very high scuffing load capacity of API GL-5, and can therefore be used for gears which have to meet API GL-4 or API GL-5 requirements. The good wear protection of both gears and rolling bearings enables a long service life of the lubricated components for reduced maintenance costs. The high micropitting resistance of GFT  $\geq 10$  acc. to FVA 54/7 offers sufficient protection to gears that are subject to high loads and would normally be susceptible to this type of damage.

The good shear stability of the synthetic base oil prevents decrease of the lubricating film thickness even under high loads. Due to the excellent ageing and oxidation stability of the synthetic base oil, oil change intervals are much longer than with mineral oils, thus reducing maintenance costs.

The good low-temperature properties enable a reliable function of the gear components, even at low temperatures. Operational reliability of the lubricated components is also enhanced by the good anti-foam and anti-corrosion properties.

## Application

Klübersynth GE 4 75 W 90 is used for the lubrication of spur, bevel and hypoid gears requiring maximum wear protection and service life, even when exposed to impact loads. Klübersynth GE 4 75 W 90 is suitable for drives in rail vehicles, industrial robots, textile machines and forming presses.

## Application notes

Klübersynth GE 4 75 W 90 can be applied by means of immersion, immersion circulation or injection. The use of drip-feed oilers, brushes, oil cans or suitable automatic lubricating systems is also possible.

## Material safety data sheets

Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klübersynth GE 4 75 W 90
Canister 5 l	+
Canister 20 l	+
Bucket 19 l	+

# Klübersynth GE 4 75 W 90

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Pack sizes	Klübersynth GE 4 75 W 90
Drum 200 l	+

  

Characteristics	Klübersynth GE 4 75 W 90
Article number	012117
Service temperature, lower limit	-40 °C
Service temperature, upper limit	150 °C
Density, DIN 51757, 20°C	approx. 0.86 g/cm <sup>3</sup>
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 210 °C
Flender foam test, ISO 12152, 25°C, oil-air dispersion, increase after 5 min	≤ 10 %
Flender foam test, ISO 12152, 25°C, total volume, increase after 1 min	≤ 15 %
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 18 mm <sup>2</sup> /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 130 mm <sup>2</sup> /s
SAE viscosity grade	75 W 90
Viscosity index, DIN ISO 2909	≥ 150
Steel corrosion, DIN ISO 7120 / ASTM D665, method A, 24 h, 60°C	rust-free
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	≤ -42 °C
API scuffing load capacity	API GL 5
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of cage	≤ 200 mg
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of rolling elements	≤ 30 mg
Four-ball tester, welding load, DIN 51350-2	≥ 3000 N
FZG micropitting test, FVA 54, GF-C / 8.3 / 90, failure load stage	≥ 10
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	≥ 14
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	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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