

Klüberfluid C-F 4 Ultra

Transparent operational lubricant for large open gear drives



Benefits for your application

- **Transparent product – immediate inspection results during operation**
- **Fluorescent lubricant film – verifying the presence of a lubricating film**
- **Vibration damping – increased component lifetime**
- **Temperature decrease – increased component lifetime**
- **Permanent fluidity – no accumulation of used grease in the guarding**
- **Less used-grease disposal – cost cuts of up to 50 %**
- **Lower quantities needed – substantial cost cuts of approx. 20 – 25 % compared to graphite-containing greases**

Description

Klüberfluid C-F 4 Ultra is a newly developed lubricant especially for the lubrication of medium-size to large girth gear drives. It is based on a mixture of synthetic hydrocarbons and mineral oil.

Klüberfluid C-F 4 Ultra provides good adhesion, resistance to high pressure and wear protection. It is suitable for use at component temperatures up to 110 °C.

No bitumen, heavy metals, chlorine or solvents are contained in the formulation of this lubricant. However, we cannot rule out the possibility that the lubricant contains traces of bitumen, heavy metals, chlorine or solvents. Depending on the application, we recommend consulting with us.

The properties of Klüberfluid C-F 4 Ultra correspond to ANSI/AGMA 9005-E02 table D-1.

Application

Klüberfluid C-F 4 Ultra can be applied by immersion, transfer paddle wheel, pressure fed circulation and spray lubrication systems. It can be used with all gear sizes and power ratings. A peripheral speed of 7 m/s should however not be exceeded.

Open gear drives are found in rotary kilns, tube mills, drums and similar machinery used in the cement, lime, gypsum, mining and chemical industries as well as in power stations. It

can also be used for medium-size to large girth gear drives in sugar and paper production as well as in the marine and offshore sector.

Application notes

When applied by immersion, Klüberfluid C-F 4 Ultra is transferred directly onto the tooth flanks whenever either the pinion or the gear rim dips into the lubricant.

A circulation lubrication system can also be employed to re-circulate the filtered lubricant under pressure onto the load-bearing tooth flanks of the pinion.

Depending on the system type, Klüberfluid C-F 4 Ultra may also be applied via other customary spray systems.

The lubricant film on the tooth flanks can be made visible by using a UV lamp of at least 366 nm.

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	Klüberfluid C-F 4 Ultra
Bucket 25 kg	+
Bucket 50 kg	+
Drum 180 kg	+



Klüberfluid C-F 4 Ultra

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Product data	Klüberfluid C-F 4 Ultra
Article number	039071
Colour space	brown
Texture	very viscous
Texture	homogeneous
Density, DIN 51757, 20 °C	approx. 0.93 g/cm ³
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 3 100 mm ² /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 165 mm ² /s
Application in automatic spray systems	approx. 0 - 80 °C
Application by immersion bath	approx. 0 - 110 °C
Application in circulation lubrication systems	approx. 0 - 80 °C
Functional lubricant film	approx. -30 °C
Thermal stability of the lubricating film	<= 110 °C
Viscosity index, DIN ISO 2909	approx. 155
Pour point, DIN ISO 3016	<= -5 °C
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	>= 190 °C
FZG scuffing test, DIN ISO 14635-1, A/8.3/90, change in weight	<= 0.2 mg/kWh
FZG scuffing test, DIN ISO 14635-1, A/8.3/90, scuffing load stage	> 12
Four-ball EP tester, welding load, DIN 51350 part 2	>= 7 000 N
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months

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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The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

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