

# Klüberfluid C-F 5 Ultra

Operational lubricant for large girth gear drives



## Benefits for your application

- Operational lubricant for large open girth gear drives incorporating immersion, circulation or spray lubrication systems
- For normal to low component and ambient temperatures
- Free from heavy metals, chlorine, solvents, bitumen and solids
- Easy application
- Optimum wear and tooth flank protection
- Low maintenance, lower disposal costs
- Light-coloured, transparent product

## Description

Klüberfluid C-F 5 ULTRA is a newly developed lubricant based on synthetic oils especially for use on medium-size to large girth gear drives. Klüberfluid C-F 5 ULTRA provides extremely good adhesion, resistance to high pressure and exceptional wear protection. It is suitable for use at component temperatures up to 110 °C.

Klüberfluid C-F 5 ULTRA is free from bitumen, solvents, heavy metals, chlorine and solid lubricants.

This product was especially developed with a view to low-temperature applications.

Klüberfluid C-F 5 ULTRA corresponds to ANSI/AGMA 9005-E02 annex D-2.

## Application

Klüberfluid C-F 5 ULTRA can be applied by immersion, transfer paddle wheel, pressure fed circulation and total loss spray lubrication systems. It can be used with all gear sizes and power ratings. A peripheral speed of 8 m/s however should not be exceeded.

Such drives are mostly found in rotary kilns, tube mills, drums and similar machinery used in the cement, lime, gypsum, mining and chemical industries as well as in coal-fired power stations. Further applications are found in sugar and paper production as well as in the marine and offshore sector.

## Application notes

When applied by immersion, Klüberfluid C-F 5 ULTRA is directly transferred onto the tooth flanks. The Klübermatic PA circulation lubrication system can also be employed to recirculate the lubricant under pressure onto the tooth flanks.

Depending on the type of system, Klüberfluid C-F 5 ULTRA may also be applied via customary spray systems.

The lubricant film on the tooth flanks can be made visible by using a UV lamp of at least 366 nm. The container should not be exposed to direct sunlight.

## 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	Klüberfluid C-F 5 Ultra
Bucket 25 kg	+
Bucket 50 kg	+
Drum 180 kg	+



# Klüberfluid C-F 5 Ultra

Operational lubricant for large girth gear drives

Product data	Klüberfluid C-F 5 Ultra
Article number	039072
Colour space	yellow
Texture	homogeneous
Density, DIN 51757, 20 °C	approx. 0.94 g/cm <sup>3</sup>
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 20 °C	approx. 13 500 mm <sup>2</sup> /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 4 900 mm <sup>2</sup> /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 350 mm <sup>2</sup> /s
Viscosity index, DIN ISO 2909	approx. 220
Application in automatic spray systems	-5 - 80 °C
Application by immersion bath	-5 - 110 °C
Application in circulation lubrication systems	-5 - 80 °C
Functional lubricant film	-40 °C
Thermal stability of the lubricating film	<= 120 °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
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	> 200 °C
Pour point, DIN ISO 3016	<= -10 °C
Four-ball EP tester, welding load, DIN 51350 part 2	>= 6 500 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.

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

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.

Publisher and Copyright: Klüber Lubrication München SE & Co. KG. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication München SE & Co. KG and if source is indicated and voucher copy is forwarded.