

# Klüberfluid C-F 3 ULTRA

Operational lubricant for large girth gear drives



## Your benefits at a glance

- Operational lubricant for open gear drives with immersion, circulation or spray lubrication systems
- For normal to elevated component temperatures
- Free from heavy metals, chlorine, solvents, bitumen and solid particles
- Easy application
- High wear and tooth flank protection
- Reduced maintenance, lower disposal costs
- Light-coloured, transparent product

## Your requirements - our solution

Klüberfluid C-F 3 ULTRA is a lubricant of a new generation, developed specifically for the lubrication of medium-size to large girth gear drives. It is based on synthetic hydrocarbons and mineral oil. It provides good adhesion, excellent resistance to high pressure and protection against wear. This product is suitable for use at component temperatures up to 120°C.

Klüberfluid C-F 3 ULTRA is free from bitumen, solvents, heavy metals, chlorine and solid particles.

Klüberfluid C-F 3 ULTRA meets the requirements of ANSI/AGMA 9005-E02 annex D-2.

## Application

Klüberfluid C-F 3 ULTRA can be used for immersion, paddle wheel, circulation and spray lubrication of large girth gear drives. Application possibilities are not restricted, neither by gear sizes nor power ratings. A peripheral speed of 10.0 m/s should not be exceeded.

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

## Application notes

When applied by immersion, Klüberfluid C-F 3 ULTRA is directly transferred to the tooth flanks. You can also use a circulation lubrication system to force-pump the lubricant onto the tooth flanks.

Klüberfluid C-F 3 ULTRA can also be applied via customary spray systems.

The lubricant film on the tooth flanks can be made visible by means of 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](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klüberfluid C-F 3 Ultra
Can 1 kg	+
Bucket 25 kg	+
Bucket 50 kg	+
Drum 180 kg	+

# Klüberfluid C-F 3 ULTRA

Operational lubricant for large girth gear drives



Characteristics	Klüberfluid C-F 3 Ultra
Article number	039080
Colour space	brown
Texture	homogeneous
Application, by immersion	15 - 120 °C
Application, in automatic spray systems	15 - 120 °C
Application, in circulation lubrication systems	15 - 80 °C
Functional lubricant film	≥ -30 °C
Thermal stability of the lubricating film, depends on the relubrication	≤ 120 °C
Density, Klüber method: PN 024, 20°C	approx. 0.92 g/cm³
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 200 °C
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 500 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 16500 mm²/s
Viscosity index, DIN ISO 2909	approx. 170
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	< 10 °C
Four-ball tester, welding load, DIN 51350-2	≥ 8000 N
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	> 12
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 95 years.

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