

# Klüberfluid C-F 3 S Ultra

Operational lubricant for large girth gear drives



## Benefits for your application

- Operational lubricant for large girth gear drives; spray application
- For normal to elevated service temperatures, combined with good low-temperature behaviour
- Free from heavy metals, chlorine, bitumen and solid lubricants
- Organic, eco-friendly solvent
- Optimum tooth flank and wear protection
- Extremely low lubricant consumption
- Easy application
- Low maintenance, lower disposal costs
- Light-coloured, transparent product

## Description

Klüberfluid C-F 3 S ULTRA is a newly developed transparent adhesive 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 3 S ULTRA provides extremely good adhesion, resistance to high pressure and exceptional wear protection. It is suitable for use at component temperatures up to 120 °C.

Klüberfluid C-F 3 S ULTRA is free from bitumen, heavy metals, chlorine and solid lubricants. It is based on Klüberfluid C-F 3 ULTRA. To enable application via spray systems at low temperatures, an eco-friendly solvent has been added. After complete evaporation of the solvent, Klüberfluid C-F 3 S ULTRA assumes the kinematic viscosity of the base product. Klüberfluid C-F 3 S ULTRA corresponds to ANSI/AGMA 9005-E02 annex D-2.

## Application

Klüberfluid C-F 3 S ULTRA is primarily used for spray lubrication of large gear rim/pinion drives. It can be used with all gear sizes and power ratings. A peripheral speed of 10 m/s should however not be exceeded.

Such drives are primarily 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

Klüberfluid C-F 3 S ULTRA is applied to the tooth flanks via spray lubrication systems working with container or barrel pumps.

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](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

### Pack sizes

Bucket 50 kg

### Klüberfluid C-F 3 S Ultra

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Product data	Klüberfluid C-F 3 S Ultra
Article number	039083
Colour space	brown
Texture	homogeneous
Density, DIN 51757, 20 °C	approx. 0.92 g/cm <sup>3</sup>
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 4 000 mm <sup>2</sup> /s
Kinematic viscosity (without solvent), DIN 51562 pt 01/ASTM D-445/ASTM D 7042, 40°C	approx. 16 500 mm <sup>2</sup> /s
Viscosity index, DIN ISO 2909	approx. 160
Application in automatic spray systems	0 - 80 °C
Functional lubricant film	>= -30 °C
Thermal stability of the lubricating film	<= 120 °C
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	> 130 °C
FZG scuffing test, based on DIN ISO 14635, A/2,76/50, change in weight	<= 0.2 mg/kWh
FZG scuffing test, based on DIN ISO 14635, A/2,76/50, scuffing load stage	>= 12
Pour point, DIN ISO 3016	< -5 °C
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.	24 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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