

# WOLFRASYN ULAF

Graphite containing high-temperature paste



## Benefits for your application

- For the thin-film lubrication of low-speed rolling and plain bearings
- For lubricant applications up to 400 °C
- Also suitable for low temperatures
- High load-carrying capacity

## Description

WOLFRASYN ULAF is a graphite-containing high-temperature paste for thin-film lubrication of rolling and plain bearings. It has a chemical composition of polyalkylene glycol oil and an inorganic solid lubricant (graphite). The synthetic base oil evaporates at temperatures above 200 °C. The solid lubricant residue is effective up to 400 °C as a dry lubricant.

## Application

WOLFRASYN ULAF has proven effective as a lubricant for kiln cart bearings in the ceramic industry and for feeder bearings subject to high temperatures in the glass industry. Other possible applications: as a bearing lubricant for roller tables in steel plants, for conveyor and transport chains in high-temperature applications and as a lubricant for plain bearings operating at high temperatures.

## Application notes

### NOTE:

Always apply WOLFRASYN ULAF in a thin layer! Clean the friction point with a sol-vent and remove any corrosion agent in the bearing before applying WOLFRASYN ULAF. Then use a brush of medium hardness to apply an even layer of WOLFRASYN ULAF to the entire raceway of the bearing. We recommend rotating the bearing components several times while applying the lubricant in order to ensure an even distribution over the raceway. If, during the rotation, a grease collar appears, remove it with the brush. Approximate values for greasing:

Polished metal bearings should be filled to a maximum of 15 % of the free bearing space. The filling quantity can be roughly calculated with the following equation:

$$d \times B \times 0.005 = g.$$

- d = diameter of the bearing bore in mm
- B = width of bearing in mm
- g = quantity of lubricant in g

In the case of phosphated bearings check if they are already lubricated. If this is the case, we recommend removing the lubricant before applying WOLFRASYN ULAF. The filling quantity is 10 % of the free bearing space.

At temperatures above 200 °C lubrication is effected by a dry lubricant film which is gradually used up. It should therefore be checked after approx. 12 months.

Relubrication with WOLFRASYN ULAF should generally take place after 24 months. The same is valid for dragging or squeeking bearings. Before relubrication blow the bearing carefully with dry air to avoid that any humidity precipitates. Shiny traces on the raceway indicate that the lubricant layer has been used up. In this case we generally recommend relubrication with WOLFRASYN ULAF. Bearings which were relubricated twice or which show wear marks or corrosion spots should be replaced.

## 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	WOLFRASYN ULAF
Bucket 25 kg	+
Can 600 g	+



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Product data	WOLFRASYN ULAF
Article number	003001
Upper service temperature	400 °C / 752 °F
Lower service temperature	-30 °C / -22 °F
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	320 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	290 x 0.1 mm
Flow pressure of lubricating greases, DIN 51805, test temperature: -30 °C	<= 1 400 mbar
Four-ball tester, welding load, DIN 51350 pt. 04	>= 3 600 N
Density at 20 °C	approx. 1.30 g/cm <sup>3</sup>
Colour space	black
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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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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