Klüberfood NH1 74-401

Synthetic long-life, high-temperature grease for the food and pharmaceutical industries

Your benefits at a glance

- Enables cost saving and production reliability
  - due to the prolonged service intervals also at medium to high temperature
  - due to reduced lubricant quantities even under high loads
- Enables reduced number of lubricants and use in numerous applications due to wide service temperature range
- NSF H1 registered and ISO 21469 certified – supports compliance with the hygienic requirements of your production. You will find further information about ISO Standard 21469 on our website www.klueber.com

Your requirements - our solution

As a food producer or manufacturer of machines used in the food processing industry, you have to take care of many aspects: from machine reliability to compliance with regulations, from simplification of maintenance processes to cost savings. Klüberfood NH1 74-401 was developed for the lubrication of production facilities in food and pharmaceutical processing plants where incidental contact with the product cannot be excluded. With this product we have combined the high performance and load-carrying capacity of a synthetic base oil with the versatility of an innovative polyurea thickener. By using Klüberfood NH1 74-401 you can therefore attain long relubrication intervals in a large number of applications. Furthermore, this high-temperature grease offers you a wide service temperature range and can be applied in rolling bearings up to 160°C, or even at short-term peaks up to 180 °C where relubrication takes place at appropriate intervals. Klüberfood NH1 74-401 is NSF H1-registered and complies with FDA 21 CFR § 178.3570.

Application

Klüberfood NH1 74-401 can be used in many different food-processing sectors, e.g. bakery, pasta, beverage, meat and fish, tobacco, cereals, grains and oils. Applications include:

- drive roller bearings in ovens and proofers
- conveyors and motor bearings
- roller bearings in packaging and labelling machines
- camshafts, linear guides, and with sliding movements

Klüberfood NH1 74-401 is not approved for use in infant formula processing as this is not a focus market for this product.

MOSH-MOAH Hint

The chromatographic measurement of MOSH can also detect saturated hydrocarbons of form other sources than mineral oil so it may be possible for chromatographic MOSH peaks to be detected in some Klüber Lubrication H1 products.

Application notes

Klüberfood NH1 74-401 can be applied by standard commercial grease application equipment, e.g. spatula, grease gun or via centralised lubrication systems.

Before applying Klüberfood NH1 74-401, all lubrication points should be thoroughly cleaned to ensure maximum hygiene conditions. This is highly recommended to ensure food-safe lubrication.

If the production process does not allow cleaning, we recommend the existing grease be replaced by purging the system during relubrication.

Please do not hesitate to contact our technical consulting and sales departments for enquiries regarding grease miscibility, relubrication procedures, etc. If you wish to optimise the service life of your equipment or have any other questions regarding your application, our experts will be pleased to help you.

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.

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Pack sizes	Klüberfood NH1 74-401
Cartrigde 370 g	+
Cartridge 370 g	+
Can 1 kg	+
Bucket 25 kg	+
Drum 180 kg	+

Characteristics	Klüberfood NH1 74-401
Article number	096161
Composition, thickener	polyurea
Composition, type of oil	synthetic hydrocarbon oil
Mineral Oils associated with MOSH (Mineral Oil Saturated Hydrocarbons) / MOAH (Mineral Oil Aromatic Hydrocarbons), (Information based on recipe. The presence of impurities, cannot be ruled out.)	Not intentionally added
Colour space	beige
Service temperature, lower limit	-40 °C
Service temperature, upper limit	160 °C
NSF H1 registration number	154567
Density, Klüber method: PN 024, 20°C	approx. 0.88 g/cm³
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	280 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	310 0.1 mm
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s^{-1}	approx. 3750 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 40 mm²/s
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 405 mm²/s
Copper corrosion, DIN 51811, 24 h, 120°C	1 - 120 - 24 corrosion degree
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	≤ 1 corrosion degree
Oil separation, DIN 51817 N, 168 h, 40°C	≤ 5 % by weight
Flow pressure, DIN 51805-2, -40°C	≤ 1400 mbar
Dropping point, DIN ISO 2176 / IP 396	≥ 200 °C
FAG FE9 rolling bearing test, DIN 51821-2, 1500 / 6000-160, service life F50	≥ 100 h
Speed factor (n x dm)	approx. 500000 mm/min
Water resistance, DIN 51807-1, 3 h, 90°C	0 - 90 rating
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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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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