

Klüberfood NH1 94-301

Synthetic lubricating grease for the food processing and pharmaceutical industries



Your benefits at a glance

- Increased component availability and extended maintenance intervals
 - due to good wear protection
 - due to good corrosion protection
 - due to good pumpability in centralised lubrication systems
- Reduces friction and wear in linear guides and ball screws performing micro-movements owing to its good wear protection properties and flow characteristics
- ISO 21469 certified - supports the compliance with the hygienic requirements in your production plant. You will find further information on ISO Standard 21469 on our website www.klueber.com

Your requirements - our solution

Klüberfood NH1 94-301 is a special lubricating grease composed of a highly refined synthetic hydrocarbon base oil and calcium complex thickener. This lubricant is NSF H1-registered and therefore complies with FDA 21 CFR § 178.3570.

Klüberfood NH1 94-301, an NSF H1-registered lubricant, is a contributor towards the supporting of food safety. The use of Klüberfood NH1 94-301 needs to be considered not in isolation but in line with other appropriate actions which have by law to be fulfilled by a food manufacturing plant to allow for food to be manufactured safely.

Application

Klüberfood NH1 94-301 is used for the lubrication of rolling bearings, plain bearings and linear guides, e.g. in blow moulding equipment.

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 94-301 can be applied by brush, spatula, grease gun or centralised lubrication system. Before applying Klüberfood NH1 94-301, all lubrication points should be thoroughly cleaned to ensure maximum hygiene conditions exist, mandatory for food- safe H1 lubrication.

If the production process does not allow cleaning we recommend the existing grease be replaced by purging the system during re-lubrication. Please do not hesitate to contact our Technical Consulting and Sales Departments in respect of grease miscibility, re-lubrication procedures etc.

This product is also available in our automatic lubricant dispenser Klübermatic. Please consult the application engineering experts from Klüber Lubrication to determine whether Klübermatic might be used under the conditions in your processes.

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.

Pack sizes

Klüberfood NH1 94-301

Bucket 25 kg

+

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Characteristics	Klüberfood NH1 94-301
Article number	096105
Composition, thickener	calcium complex soap
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.)	Intentionally added
Colour space	beige
Service temperature, lower limit	-40 °C
Service temperature, upper limit	140 °C
NSF H1 registration number	140682
Density, Klüber method: PN 024, 20°C	approx. 0.98 g/cm³
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	310 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	340 0.1 mm
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , lower limit	2500 mPas
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , upper limit	5000 mPas
Kinematic viscosity of the base oil, 40°C, calculated data	approx. 300 mm²/s
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	≤ 1 corrosion degree
Oil separation, ASTM D6184, 30 h, 100°C	≤ 7 % by weight
Flow pressure, DIN 51805-2, -40°C	≤ 1400 mbar
Dropping point, DIN ISO 2176 / IP 396	≥ 250 °C
Four-ball tester, welding load, DIN 51350-4	approx. 3000 N
Speed factor (n x dm)	approx. 400000 mm/min
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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