

## Klüberpaste UH1 84-201

White lubricating and assembly paste for the food-processing and pharmaceutical industries

#### Your benefits at a glance

- Reliable adhesion to the friction point, also when subject to humidity
- Good compatibility with high-alloy steels
- ISO 21469 certified supports the compliance with the hygienic requirements in your production. You will find further information about ISO Standard 21469 on our website www.klueber.com.

### Your requirements - our solution

Klüberpaste UH1 84-201 is a white lubricating and assembly paste for versatile lubricating and assembly purposes in hygienically sensitive environments.

It contains fully synthetic base oils and a special blend of organic and inorganic thickeners.

Klüberpaste UH1 84-201 is water-resistant and provides good corrosion protection. It is therefore suitable for friction points affected by humidity which normally require the use of special products.

Klüberpaste UH1 84-201 is NSF H1 registered and therefore complies with FDA 21 CFR § 178.3570. The lubricant was developed for incidental contact with products and packaging materials in the food-processing, cosmetics, pharmaceutical or animal feed industries. The use of Klüberpaste UH1 84-201 can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

## Application

Klüberpaste UH1 84-201 is generally suitable for almost all friction points in the food-processing and pharmaceutical industries

- as an assembly paste for transition and loose fits to prevent fretting corrosion,
- as a long-term lubricant for low-speed guide rails, hinges, rollers, chains, etc

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**

Before applying the paste, it is important to clean and degrease the contact surfaces thoroughly. A thin layer of the paste is then applied by brush, leather cloth or synthetic sponge.

Klüberpaste UH1 84-201 spreads easily over the entire surface, preventing excessive lubrication at lubrication points without reservoir.

When using the paste on small gears, make sure the tooth faces are evenly greased. Before applying the product to plastic components it should be tested for compatibility with the original material.

Opened packs must be thoroughly closed again after use to protect the paste from contamination.

The friction values indicated on page 2 in the Section Product Data were determined with two different materials. Other materials/surfaces have to be checked accordingly.

### 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.

### **MOSH-MOAH Hint**

Pack sizes	Klüberpaste UH1 84-201
Cartrigde 500 g	+
Can 600 g	+





# Klüberpaste UH1 84-201

White lubricating and assembly paste for the food-processing and pharmaceutical industries

Pack sizes	Klüberpaste UH1 84-201
Bucket 25 kg	+
Characteristics	Klüberpaste UH1 84-201
Article number	005113
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	white
Service temperature, lower limit	-45 °C
Service temperature, upper limit	120 °C
NSF H1 registration number	136305
NLGI grade, DIN 51818	1
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C, without Polymer	approx. 22 mm²/s
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C, without Polymer	approx. 200 mm²/s
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h	≤ 1 corrosion degree
Four-ball tester, welding load, DIN 51350-4	≥ 3000 N
Friction coefficient screw test, hexagon bolts M10 x 30-8.8, DIN EN ISO 4017, tightening speed $n = 5 \text{ min}^{-1}$ , number of screws = 20, nut M10-8, plain and degreased, face material 42CrMo4 with roughness Ra 1.6, tightening torque MA = 50 Nm, averaged bearing surface friction coefficient (initial tightening), external test	0.15
Friction coefficient screw test, hexagon bolts M10 x 30-8.8, DIN EN ISO 4017, tightening speed $n = 5 \text{ min}^{-1}$ , number of screws = 20, nut M10-8, plain and degreased, face material 42CrMo4 with roughness Ra 1.6, tightening torque MA = 50 Nm, averaged thread friction coefficient (initial tightening), external test	0.1
Friction coefficient screw test, hexagon bolts M10 x 30-8.8, DIN EN ISO 4017, tightening speed $n = 5 \text{ min}^{-1}$ , number of screws = 20, nut M10-8, plain and degreased, face material 42CrMo4 with roughness Ra 1.6, tightening torque MA = 50 Nm, standard deviation (S) of averaged bearing surface friction coefficient (initial tightening), external test	0.005
Friction coefficient screw test, hexagon bolts M10 x 30-8.8, DIN EN ISO 4017, tightening speed $n = 5 \text{ min}^{-1}$ , number of screws = 20, nut M10-8, plain and degreased, face material 42CrMo4 with roughness Ra 1.6, tightening torque MA = 50 Nm, standard deviation (S) of averaged thread friction coefficient (initial tightening), external test	0.011
Water resistance, DIN 51807-1, 3 h, 90°C	≤ 1 - 90 rating
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	d 36 months





# Klüberpaste UH1 84-201

White lubricating and assembly paste for the food-processing and pharmaceutical industries

## 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.

Klüber Lubrication München GmbH & Co. KG / Geisenhausenerstraße 7 / 81379 München / Germany / phone +49 89 7876-0 / fax +49 89 7876-333.

The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

Publisher and Copyright: Klüber Lubrication München GmbH & Co. KG. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication München GmbH & Co. KG and if source is indicated and voucher copy is forwarded.

