Klüberfood NH1 CH 2 Plus

High-temperature chain oils for the food-processing industry

Your benefits at a glance

- Reduced oil consumption due to lower evaporation losses compared to other ester oils commonly used in high-temperature chain applications in the food-processing industry
- Extended chain life through enhanced wear protection, leading to lower life cycle costs
- NSF-H1 registration for increased process reliability
- ISO 21469 certified - supports 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

The Klüberfood NH1 CH 2 Plus oil series comprises synthetic high-temperature chain oils incorporating special base oils ensuring reliable lubrication at high temperatures. Owing to special additives, these oils offer extremely good wear protection. They show low evaporation losses and high oxidation stability for optimised relubrication intervals and reduced oil quantities.

Products of the Klüberfood NH1 CH 2 Plus oil series are NSF H1-registered and therefore comply with FDA 21 CFR § 178.3570. The lubricants were developed for incidental contact with products and packaging materials in the food-processing, cosmetics, pharmaceutical or animal feed industries. The use of the Klüberfood NH1 CH 2 Plus oil series can contribute to increased reliability of your production equipment and processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

Application

The Klüberfood NH1 CH 2 Plus oil series has been designed for lubrication of all drive, control and transport chains subject to high temperatures and loads. They are particularly suitable for use in chain applications, in beverage can decorating, bakery ovens, as well as other high-temperature chain applications in the food industry. These oils are suitable for chain designs both with and without elastomer O-rings for slow, medium and high-speed chain applications such as those found in the beverage can manufacturing industry.

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 CH 2 Plus oils can be applied by means of brush, gravity oil feed or automatic lubrication systems.

When applied via automatic lubrication systems, please observe the maximum viscosity specified by the equipment manufacturer.

In view of the many different paint systems and testing criteria, paint compatibility tests should be performed by the user prior to series application.

In case of contact with elastomers and plastics their resistance to products of the Klüberfood NH1 CH 2 Plus oil series should be checked. The colour of the product may change during storage with no performance reduction.

Please contact our technical sales staff for further information and support when required.

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 CH 2-75 Plus	Klüberfood NH1 CH 2-220 Plus	Klüberfood NH1 CH 2-260 Plus
Canister 1 l		+	+
Canister 5 l	+	+	+
Canister 20 l	+	+	+
Drum 200 l	+	+	+

Characteristics	Klüberfood NH1 CH 2-75 Plus	Klüberfood NH1 CH 2-220 Plus	Klüberfood NH1 CH 2-260 Plus
Article number	002162	002163	002164
Composition, type of oil	ester oil	ester oil	ester 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	Not intentionally added	Not intentionally added
Colour space	yellow	yellow	yellow
Service temperature, lower limit	-20 °C	-20 °C	-15 °C
Service temperature, upper limit	250 °C	250 °C	250 °C
NSF H1 registration number	146429	146427	146428
Density, DIN 51757, 20°C	approx. 0.99 g/cm³	approx. 0.94 g/cm³	approx. 0.97 g/cm³
ISO viscosity grade, DIN ISO 3448, ISO VG	-	220	-
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 11 mm²/s	approx. 21 mm²/s	approx. 21 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 75 mm²/s	approx. 220 mm²/s	approx. 260 mm²/s
Viscosity index, DIN ISO 2909	≥ 120	≥ 105	≥ 90
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months	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.

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.