

Klüberfood NH1 CH 2 oil series

High-temperature chain oils for the food and pharmaceutical industries



Benefits for your application

- Improved wear protection resulting in extended chain life
- Low evaporation compared with many other ester oils commonly used in high temperature chain applications in the food industry delivering reduction in oil consumption and life cycle costs
- NSF H1-registered supporting process reliability
- 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

Description

Klüberfood NH1 CH 2 series oils are synthetic high-temperature chain oils ensuring reliable lubrication even at high temperatures. Owing to a special additive package these oils offer wear protection. They show low evaporation losses at high temperature.

Klüberfood NH1 CH 2 series oils 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 Klüberfood NH1 CH 2 series oils can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

Application

The Klüberfood NH1 CH 2 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 bakery and other high temperature chain applications in the food industry. ISO 21469 makes reference to the use of lubricants for incidental contact with the food product and its packaging. Klüberfood NH1 CH 2 series oils support legislation compliance due to their NSF H1 status and use for areas with incidental food contact.

Please do not spray in enclosed space for example electrical cabinets. Please see product label for more information.

Application notes

- The oils can be applied by means of brush, oil feeder or automatic lubrication systems.
- When applied in automatic lubrication systems, please observe the maximum viscosity specified by the machine manufacturer.
- Do not spray on a naked flame or any incandescent material and keep away from sources of ignition.
- 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 Klüberfood NH1 CH 2 series oils should be checked.
- The low evaporation losses and high oxidation stability allow optimized relubrication intervals and quantities.

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

Do not expose Klüberfood NH1 CH 2-220 spray to direct sunlight and temperatures above 50 °C!

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 CH 2-150 | Klüberfood NH1 CH 2-220 | Klüberfood NH1 CH 2-220 Spray |
|--------------------|----------------------------|----------------------------|----------------------------------|
| Aerosol can 400 ml | - | - | + |
| Canister 20 I | + | + | - |
| Drum 200 I | + | + | - |



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| Product data | Klüberfood NH1 CH 2-150 | Klüberfood NH1 CH 2-220 | Klüberfood NH1 CH 2-220 Spray |
|------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------------|----------------------------------|
| Article number | 002143 | 002132 | 081310 |
| NSF-H1 registration | 141 948 | 139 419 | 142 052 |
| Chemical composition, type of oil | ester oil | ester oil | ester oil |
| Lower service temperature | 0 °C / 32 °F | 0 °C / 32 °F | 0 °C / 32 °F |
| Upper service temperature | 250 °C / 482 °F | 250 °C / 482 °F | 250 °C / 482 °F |
| Colour space | yellow | yellow | yellow |
| Density, DIN 51757, 20 °C | approx. 0.96 g/cm ³ | approx. 0.96 g/cm³ | approx. 0.96 g/cm³ |
| Viscosity index, DIN ISO 2909 | >= 70 | >= 70 | >= 70 |
| Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C | approx. 150 mm ² /s | approx. 220 mm²/s | approx. 220 mm²/s |
| Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C | approx. 13 mm²/s | approx. 17 mm ² /s | approx. 17 mm ² /s |
| Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx. | 24 months | 24 months | 36 months |

Klüberfood NH1 CH 2-220 Spray: The technical data refer to the active agent of the spray.

Propellant: propane-butane.

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 80 years.

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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.

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