

Klübertec CM 2-004

Metalworking oil registered as NSF H1



Benefits for your application

- Klübertec CM 2-004 enhances process stability in the manufacture of packages for the food-processing and pharmaceutical industries
- The product's miscibility allows individual adjustment of performance capabilities to the process, e.g. through mixing with Klüberfluid NH1 1-002 or PARALIQ 91
- Low-residue evaporation at elevated temperature makes subsequent cleaning in many cases unnecessary

Description

Klübertec CM 2-004 is a low-viscosity metalworking oil. The product is ready for use, thus reducing the risk of inappropriate product concentration by the user. For a product with such low viscosity, Klübertec CM 2-004 has a high flash point and offers good wear protection.

Klübertec CM 2-004 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 Klübertec CM 2-004 can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

Application

Basic uses of Klübertec CM 2-004 are in simple metalworking processes – e.g. punching or light forming processes – where a product registered as NSF-H1 is required.

Typical examples of use are:

- Deep-drawing of aluminium foil packages for the food-processing or pharmaceutical industries, cans, crown caps and other bottle caps
- Light forming, e.g. edging of thin or very thin steel or other sheet metal containers for food or pharmaceutical products

- Punching of thin or very thin aluminium or steel sheets for subsequent processing

Application notes

For applications at elevated temperature, the flammability of the product should be borne in mind.

For mixing with Klüberfluid NH1 1-002 or PARALIQ 91:

- Any mixing ratio may be chosen to match the individual process.
- No specific mixing sequence has to be followed.
- The notes in the material safety data sheet have to be observed.

When applied by spray, an exhaustion device is necessary in order to avoid inhalation of spray mist (see SDS point 2).

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	Klübertec CM 2-004
Canister 20 l	+
Drum 200 l	+

Product data	Klübertec CM 2-004
Article number	037050
NSF-H1 registration	143 070
Chemical composition, solvent	synthetic isoparaffin



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Product data	Klübertec CM 2-004
Chemical composition, type of oil	ester oil
Appearance	clear
Colour space	colourless
Odour	typical odour
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	>= 75 °C
Density, DIN 51757, 20 °C	approx. 0.79 g/cm ³
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 25 °C	approx. 2.9 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

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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