

## PARALIQ P 12, P 40

Lubricating oils for the food and pharmaceutical industries

#### Your benefits at a glance

- · Based on medically pure oils
- NSF H1-registered supporting process reliability
- NSF ISO 21469 certified supports compliance with the hygienic requirements of your production. You will find further information on ISO Standard 21469 on our website www.klueber.com

#### Your requirements - our solution

PARALIQ P 12 and P 40 are based on medically pure special oils which are neutral in odour and taste acc. to the European Pharmacopoeia (medical white oil).

PARALIQ P 12 and P 40 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 PARALIQ P 12 and P 40 can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

Furthermore, the products can be used as a surface lubricant for the production of metal articles, e.g. for food packaging, as they are in conformity with FDA CFR 21 § 178.3910 (a).

### Application

PARALIQ P 12 and P 40 can be used for machines in the foodprocessing and pharmaceutical industries requiring medically pure oils, e.g. spindles, joints, chains, gearwheels, plain bearings, pistons, guides and tubular tracks.

The oils can also be used for corrosion protection. PARALIQ P 12 can also be used as a heat transfer oil in enclosed systems in the food-processing, pharmaceutical and cosmetics industries.

### **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**

- 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.
- If PARALIQ P 12 is used as a heat transfer oil, the temperature must not exceed 200 °C! We recommend checking its chemical and physical characteristics on a regular basis.

### 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	PARALIQ P 12	PARALIQ P 40
Canister 1 I	+	
Canister 5 I	+	+
Canister 20 I	+	+
Drum 200 l	+	+



# PARALIQ P 12, P 40

Lubricating oils for the food and pharmaceutical industries



Characteristics	PARALIQ P 12	PARALIQ P 40
Article number	061005	061006
Composition, type of oil	paraffinic mineral oil	paraffinic mineral 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	Intentionally added
Colour space	colourless	colourless
Service temperature, lower limit	-9 °C	-10 °C
Service temperature, upper limit	60 °C	0° C
NSF H1 registration number	056374	056379
NSF HT1 registration number	056374	-
Density, DIN 51757, 20°C	approx. 0.86 g/cm <sup>3</sup>	approx. 0.89 g/cm <sup>3</sup>
ISO viscosity grade, DIN ISO 3448, ISO VG	-	68
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 3.7 mm²/s	approx. 7.3 mm <sup>2</sup> /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 21 mm <sup>2</sup> /s	approx. 68 mm²/s
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 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.

#### 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.