

UNISILKON LCA 3801

Special lubricating grease for drinking water valves and non-metallic material combinations



Your benefits at a glance

- For all types of material combinations like ceramics/ceramics, metal/plastic or elastomers
- With load-bearing areas between 50 and 99.9 %, good wetting behaviour and good adhesion to different material surfaces, the product ensures consistent smooth operation over the entire lifetime of the component
- Operating torque nearly constant under changing temperatures, enabling constant smooth operation up to an admissible surface pressure of approx. 4 N/mm²
- Very good resistance to both cold and hot water
- Good thermal stability even when applied in a thin film ensures a long functional lifetime of ceramic disc cartridges
- Good sealing effect and backflow from "lubricant depot"
- Compatible with most ceramics, metals, elastomers and plastics
- Approved acc. to BWGL-KTW (UBA guideline), NSF/ANSI/CAN 61, ACS (further approvals on request) for use in all friction points exposed to water or in permanent contact with drinking water

Your requirements - our solution

UNISILKON LCA 3801 is a special lubricating grease neutral in odour and taste and based on silicone oil and a calcium soap. It has been developed primarily for valves and fittings as well as sanitary applications. UNISILKON LCA 3801 provides effective wetting even in narrow lubricating gaps and friction points that are difficult to reach.

Uniform operational smoothness is achieved with cold or hot water as the viscosity is not strongly influenced by changing temperatures, e.g. in single-lever mixers with specific surface pressures up to approx. 4 N/mm², depending on the design of ceramic cartridges.

UNISILKON LCA 3801 is resistant to many media used in the beverage industry and to acid or alkaline disinfectants but not resistant to most organic solvents and strong acids or lyes.

Application

UNISILKON LCA 3801 is used in the entire sanitary field for the lubrication of all kinds of ceramic disc cartridges (surface pressure ≥ 0.4 to 4 N/mm²), ceramic head parts, mixing taps, piston and ball mixers. It can also be used as a sealing grease and assembly aid for valves and fittings in domestic and heating installations with exposure to cold and hot water or water vapour.

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

UNISILKON LCA 3801 is neutral towards ceramics, metals, thermoplastics (e.g. ABS, PC) as well as elastomers (e.g. NBR, EPDM, VMQ). Owing to the many different compositions of elastomers and plastics, we recommend checking their compatibility prior to series application.

UNISILKON LCA 3801 can be easily applied by brush, spatula, sponge or by means of special Apply+Lube technology, e.g. tampon printing.

In this context, please also refer to our Safety Data Sheet.

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

Cartridge 400 g

UNISILKON LCA 3801

+

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Pack sizes	UNISILKON LCA 3801
Can 1 kg	+
Bucket 25 kg	+
Characteristics	UNISILKON LCA 3801
Article number	022100
Composition, thickener	calcium soap
Composition, type of oil	silicone 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
Colour space	beige
Texture	fibrous , homogeneous
Service temperature, lower limit	-40 °C
Service temperature, upper limit	140 °C
NSF H1 registration number	146027
Density, Klüber method: PN 024, 20°C	approx. 0.97 g/cm ³
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	295 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	325 0.1 mm
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , lower limit	12000 mPas
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹ , upper limit	20000 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 25°C	approx. 5000 mm ² /s
Copper corrosion, DIN 51811, 5 h, 100°C	1 - 100 - 5 corrosion degree
Water resistance, DIN 51807-1, 3 h, 90°C	0 - 90 rating
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	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.

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