

# UNISILKON L 641

Special grease for drinking water, beverage and heating valves



## Benefits for your application

- Excellent wetting power
- Operational smoothness due to a good viscosity-temperature behaviour
- Very good resistance to water and water vapour
- High thermal stability
- Good sealing effect
- Neutral towards metals, many elastomers and plastics
- NSF H1 registered
- Tested acc. to BWGL-KTW (UBA guideline), WRAS, ACS and NSF/ANSI/CAN 61 as well as DIN-DVGW-type examination certificate acc. to DIN EN 377 class E (...160 °C) as lubricant for application in equipment and actuators for fuel gases

## Description

UNISILKON L 641 is a special lubricating grease based on silicone oil and PTFE for valves and other elements in the heating, beverage and sanitary sector. UNISILKON L 641 offers good penetration ability in small lubrication gaps and lube points of difficult access. As its viscosity is rather independent from service temperatures, UNISILKON L 641 allows constant actuating forces within the whole cold/hot water range of single-lever mixer taps. Due to its chemical composition, UNISILKON L 641 has shown to be resistant to various substances in the food-processing and beverage industries like beer, milk, juices, liquors, acid and alkaline disinfectants. UNISILKON L 641 is not compatible with most organic solvents as well as acid and alkaline solutions.

UNISILKON L 641 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 UNISILKON L 641 can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

## Application

UNISILKON L 641 is used as sealing and assembly aid for seals and packings in contact with water or water vapour, e.g.: domestic installations - ball valves; single-lever mixers – piston cartouches, ceramic discs; mixer taps with two handles – swivel

spouts, shower switches, shower heads; thermostatic mixer taps – thermo regulators and elements; heating – thermostatic valves, tap cocks, pressfit seals; water hydraulics – sealing grease for radial shaft seals.

## Application notes

UNISILKON L 641 is neutral towards most metals, thermoplastics and elastomers. Owing to the many different elastomer and plastic compositions their compatibility should be checked prior to series applications. UNISILKON L 641 can be applied by means of spatula, brush, usual metering devices or the tampon printing method. Please observe the material safety data sheet.

## Material safety data sheets

Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.



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Pack sizes	UNISILKON L 641
Can 500 g	+
Bucket 30 kg	+

Product data	UNISILKON L 641
Article number	022121
NSF-H1 registration	056 400
Chemical composition, type of oil	methyl silicone oil
Chemical composition, solid lubricant	PTFE
Lower service temperature	-40 °C / -40 °F
Upper service temperature	160 °C / 320 °F
Colour space	white
Texture	long-fibred
Texture	homogeneous
Density at 20 °C	approx. 1.18 g/cm <sup>3</sup>
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	300 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	320 x 0.1 mm
Shear viscosity at 25 °C, shear rate 50 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	approx. 135 000 mPas
Shear viscosity at 25 °C, shear rate 50 s <sup>-1</sup> , equipment: rotational viscometer, upper limit value	approx. 205 000 mPas
Drop point, DIN ISO 2176, IP 396	>= 230 °C
Water resistance, DIN 51807 pt. 01, 3 h/90 °C, rating	<= 1 - 90
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 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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