# UNISILKON L 641

Special grease for drinking water, beverage and heating valves



## 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. The grease is compatible with most substances in the foodprocessing 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.

### Application

UNISILKON L 641 is used as sealing and assembly aid for seals and packings in contact with hot and cold water or steam, e.g.: <u>domestic</u> <u>installations</u> - ball valves; <u>single-</u> <u>lever mixers</u> – piston cartouches, ceramic discs; <u>mixer taps with two</u> <u>handles</u> – swivel spouts, shower switches, shower heads; <u>thermostatic mixer taps</u> – thermo regulators and elements; <u>heating</u> – thermostatic valves, tap cocks, pressfit seals; <u>Water hydraulics</u> – sealing grease for radial shaft seals.

### **Application notes**

UNISILKON L 641 is neutral towards metals, thermoplastics (e.g. ABS, PC) and elastomers (e.g. NBR, EPDM). 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.

# Minimum shelf life

The minimum shelf life is approx. 36 months if the product is stored in its unopened original container in a dry place.

#### Pack sizes

500 g can 30 kg bucket

### **UNISILKON L 641**

- Excellent wetting power
- Operational smoothness due to a good viscositytemperature behavior
- Excellent resistance to hot and cold water, steam
- High thermal stability
- Good sealing effect
- Neutral towards metals, elastomers and plastics
- NSF H1 registered
- Certified acc. to DVGW-KTW, WRAS, AS 4020, NSF Standard 51 and NSF Standard 61

Material safety data sheets can be downloaded or requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber.



# **Product data**

Base oil	silicone oil
Thickener	PTFE
Service temperature range [°C]*	-40 to 160
Color	white
Texture	homogeneous, long-fibred
Density at 20°C, [g/cm <sup>3</sup> ]	1.20
Worked penetration, DIN ISO 2137, at 25°C [0.1mm], approx.	300-320
Klüber viscosity grade**	ES
Drop point, DIN ISO 2176 [°C]	>230
Water resistance, DIN 51807 part 1, 3h/90°C, rating	≤1-90
NSF-H1 registration***, registration no	056400

Service temperatures are guide values which depend on the lubricant's composition, the intended use and the application method. Lubricants change their consistency, apparent dynamic viscosity or viscosity depending on the mechano-dynamical loads, time, pressure and temperature. These changes in product characteristics may affect the function of a component. Klüber viscosity grades: EL = extra light lubricating grease; L = light lubricating grease; M = medium lubricating grease; S = heavy lubricating grease; ES = extra heavy lubricating grease; \*\*

This lubricant is registered as H1, which means that it has been designed for incidental, technically unavoidable food contact. Experience shows that it can be used for equivalent applications in the cosmetic and pharmaceutical industry under the conditions described in the product information leaflet. Specific test results as e.g. biocompatibility, which could be an additional requirement for applications in the pharmaceutical industry, are not available for this product. Therefore, before using the lubricant adequate risk analyses should be performed and, if necessary, suitable measures be taken by the manufacturer and user of installations in order to exclude the risk of health hazards and personal injuries.

The data in this product information is based on our general experience and knowledge at the time of printing 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 tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



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