

Klüberbeta VR 87-883

Special lubricant, sliding and sealing agent for valves and fittings



Your benefits at a glance

- Extended component service life due to
 - High thermal stability and very good low-temperature behaviour
 - neutral behaviour towards elastomers, plastics and metals
 - good resistance to media and sealing effect e.g. towards disinfectants and cleaning agents
 - very good resistance to both cold and hot water
- Operational smoothness and prevention of stick-slip due to
 - very low temperature dependence of lubricant film
 - very good and durable wetting of friction points
 - reduced friction and wear in a multitude of material combinations
- Certified acc. to globally leading standards for lubricants used for valves and fittings, e.g. guideline of the German Environmental Agency (UBA) BWGL-KTW, NSF/ANSI/CAN 61, WRAS, ACS, AS4020 and NSF H1 (further standards on request) and DIN-DVGW-type examination certificate acc. to DIN EN 377 class E (...160 °C) as lubricant for use in equipment and actuators for fuel gases

Your requirements - our solution

Klüberbeta VR 87-883 is a speciality lubricant based on silicone oil and contains light-coloured solid lubricants. It offers high thermal stability in the tribo-system, even under the influence of highly varied ambient conditions.

Klüberbeta VR 87-883 offers good adhesion to various materials and their surfaces. While even friction points that are hard to access or narrow lubrication gaps are reliably wetted, the lubricant does not tend to flow off where the component geometry is unfavourable, e.g. in vertical arrangements or moving friction points.

Application

Klüberbeta VR 87-883 offers versatile uses as a design element or assembly aid.

The product is used as lubricant, sliding and sealing agent e.g. in gas equipment of all categories including the additional fittings contained in them or intended to be fitted in them which can come into contact with fuel gases as defined in EN 377. Such fittings include ball, taper plug and other valves in cooking and heating installations, etc. (in copper and copper alloy material pairings as well as in those of aluminium/brass or aluminium/aluminium) that are used with fuel gases or gas mixtures such as natural or town gas as well as propane and butane as specified in DVGW worksheet G260.

Furthermore, Klüberbeta VR 87-883 is used wherever improved sliding performance, prevention of stick-slip and a reduction of abrasion and wear are desirable, e.g. in ceramic discs and piston cartouches, valves and fittings in heating applications (e.g. thermostatic valves), plastic valves, also when exposed to cold or hot water or steam up to 130 °C.

Further possible applications are friction points in the beverage, food-processing, cosmetics, pharmaceutical and animal feed industries, as a pressing-in or removal aid (e.g. for O rings, sleeves, etc.) or as a sliding and sealing agent for ground joints or valves in laboratory apparatus (e.g. in the chemical industry). In pneumatics, the product may be used for the initial and for-life lubrication of cylinders and valves and as an assembly aid e.g. for radial shaft seals or sealing packings, also in combination with cold, warm and hot water or many other chemical substances.

Klüberbeta VR 87-883 has low or no resistance to most organic solvents as well as strong acidic and alkaline solutions.

Resistance to acidic and alkaline solutions with a concentration up to 10 % and a temperature up to 90 °C, however, is good.

Klüberbeta VR 87-883 is NSF H1 registered and therefore complies with FDA 21 CFR § 178.3570. The use of this lubricant contributes

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to increased reliability of your production processes. Nevertheless it is recommended to conduct an additional risk analysis, e.g. HACCP.

Application notes

Klüberbeta VR 87-883 can be applied by means of spatula, brush, customary metering and application equipment as well as by means of the pad printing process.

When using pumps, please make sure to observe the pertinent information in the safety data sheet.

For initial lubrication in particular, all surfaces/friction points in contact with the lubricant should preferably be free of oil, grease, process substances, perspiration and contamination.

Klüberbeta VR 87-883 is neutral towards most metal, nonferrous metals, plastics and elastomers. Owing to the many different compositions especially of elastomer and plastic materials, we recommend checking their compatibility prior to series application.

Irrespective of the fields of application stated in this product information leaflet, and limitations of compatibilities and suitability with specific fittings, components, etc., also in combination with the stated upper and lower service temperature limits, we recommend having them checked and approved at the manufacturer or operator, if possible in the original component and under conditions and influences resembling those in practice.

If you wish to optimise the service life of your equipment or have any other questions regarding your application, our experts will be pleased to help you with their advice.

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	Klüberbeta VR 87-883
Can 750 g	+
Bucket 30 kg	+

Characteristics	Klüberbeta VR 87-883
Article number	022257
Composition, solid lubricant	PTFE
Composition, type of oil	silicone oil
Colour space	white
Texture	fibrous , homogeneous
Service temperature, lower limit	-40 °C
Service temperature, upper limit	160 °C
NSF H1 registration number	156353
NLGI grade, DIN 51818	3
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	220 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	250 0.1 mm
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s ⁻¹	approx. 13000 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 25°C	approx. 1350 mm ² /s
Copper corrosion, DIN 51811, 24 h, 100°C	1 - 100 - 24 corrosion degree
Water resistance, DIN 51807-1, 3 h, 90°C	≤ 1 - 90 rating

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Characteristics

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Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened 36 months original container, approx.

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 90 years.

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