

# Klüberlub RM 41-1503

Sealing and lubricating grease for tunnel boring machines



## Benefits for your application

- **Excellent sealing behaviour for longer component life, enabled by**
  - good adhesion, water and media resistance
  - good corrosion protection and compatibility with elastomers
- **High efficiency, lower consumption and reduced maintenance efforts due to**
  - good pumpability in central lubrication systems
  - good adhesion, giving extended relubrication intervals
  - reduced number of lubricant varieties
- **High base oil viscosity for excellent sealing effect at higher ambient temperatures**

## Description

Klüberlub RM 41-1503 is a sealing and lubricating grease based on highly viscous mineral oil (ISO VG 1500) and a special lithium soap containing special additives providing good ageing resistance and corrosion protection. Its excellent sealing effect will remain very effective at higher ambient temperatures owing to the high base oil viscosity and its NLGI 3 consistency.

Additionally, since Klüberlub BE 41-1503 is free of black solid lubricants, it is cleaner to handle.

## Application

Klüberlub RM 41-1503 is mainly used to seal and lubricate sealing chambers in the main bearings of tunnel boring machines. It keeps away water and soil, preventing bearing contamination. The effectiveness of this product has already been successfully confirmed in field use. A renowned manufacturer of tunnel boring machines has therefore added Klüberlub RM 41-1503 to his lubrication chart.

## Application notes

When using the product with automatic grease pumps, the ambient temperature should be  $\geq 15$  °C. Generally speaking, plastics and elastomers resistant to mineral oil or mineral oil-based greases are compatible with Klüberlub RM 41-1503. However, we recommend checking compatibility prior to series application to ensure reliable operation.

## 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.

Pack sizes	Klüberlub RM 41-1503
Cartridge 400 g	+
Drum 180 kg	+

Product data	Klüberlub RM 41-1503
Article number	097122
Lower service temperature	-10 °C / 14 °F
Upper service temperature	140 °C / 284 °F
Colour space	brown
Density at 20 °C	approx. 0.92 g/cm <sup>3</sup>



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Product data	Klüberlub RM 41-1503
Worked penetration, DIN ISO 2137, 25 °C, lower limit value	230 x 0.1 mm
Worked penetration, DIN ISO 2137, 25 °C, upper limit value	270 x 0.1 mm
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 1 500 mm <sup>2</sup> /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 50 mm <sup>2</sup> /s
Copper corrosion, DIN 51811, (lubricating grease), 24h/120 °C	1 - 120 corrosion degree
Flow pressure of lubricating greases, DIN 51805, test temperature: -10 °C	<= 1 400 mbar
Drop point, DIN ISO 2176, IP 396	>= 180 °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.	24 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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