

# Klübersynth R 42-111

Fully synthetic speciality grease for seals



## Benefits for your application

- **Optimised lubrication of heavily loaded radial shaft seals**
  - Extends the service life of your seals
  - Enables reliable lubrication in start-stop operation
- **Easier seal assembly**
- **Longer component availability due to reduction of leakage**
- **Versatile uses due to excellent compatibility with elastomers**

## Description

Your gearboxes contain numerous seals whose long-term functioning is essential for low-friction operation. Any leakage leads to time-consuming and expensive maintenance operations.

Klübersynth R 42-111 was especially developed for the optimised operation of radial shaft seals and to facilitate proper seal assembly.

The use of fully synthetic base oils enables for-life lubrication, especially at high temperatures. The particular mix of base oils used leads to extraordinarily good compatibility with many frequently used elastomers (NBR, ACM, FKM) and plastics.

Klübersynth R 42-111 lubricates the seal during start-stop operation until the (gear) oil reaches the seal. It also improves seal lip wetting by the oil. Dirt and moisture are reliably prevented from entering the gearbox.

## Application

Klübersynth R 42-111 is extremely well suitable for the lubrication of seals and plastics that are often used in gearboxes and motors:

- Radial shaft seals made of FKM, NBR, ACM
- O-ring seals made of NBR, HNBR or FKM
- Plastics such as POM or PA

## Application notes

Klübersynth R 42-111 has been tested and approved for contact-free greasing in minimum dosing quantities starting from 0.1 mg via electro-pneumatic jet valves. If the lubricant is to be pumped and applied via automatic systems, or intended for series application, the correct function must be checked with the equipment manufacturer in advance.

The lubricant may also be applied by brush, spatula or grease gun. As the performance of the grease can be impaired by mixing with other products, it is important to use exclusively Klübersynth R 42-111 as seal and assembly grease.

For your application, please check compatibility with the materials used and the operating conditions such as temperature.

For greasing radial shaft seals, please bear in mind that approx. 40 % of the space between the dust lip and the sealing lip should be filled with grease. The grease should be applied at regular intervals all around the perimeter of the sealing lip. This can be done by means of a greasing system or a tube with a suitable spout. This is illustrated by the following picture:

## Greased radial shaft seal



## 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	Klübersynth R 42-111
Cartridge 400 g	+
Tube 45 g	+
Can 1 kg	+
Bucket 25 kg	+

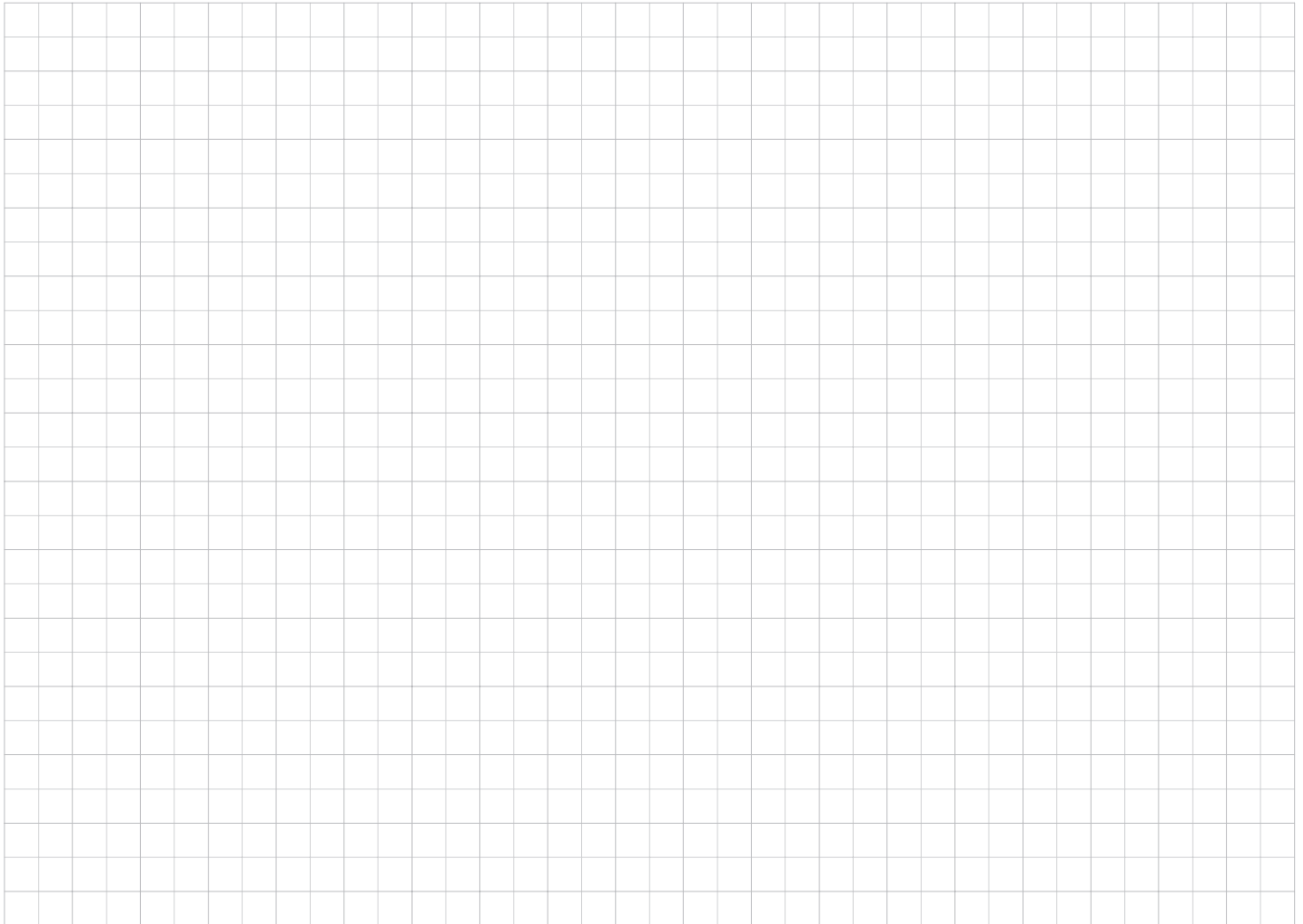


<b>Product data</b>	<b>Klübersynth R 42-111</b>
Article number	094119
Chemical composition, type of oil	ester oil
Chemical composition, type of oil	synthetic hydrocarbon oil
Chemical composition, thickener	special lithium soap
Lower service temperature	-40 °C / -40 °F
Upper service temperature	150 °C / 302 °F
Colour space	brown
Density at 20 °C	approx. 0.92 g/cm <sup>3</sup>
Compatibility with elastomer: 70 ACM 380 DF	confirmed
Compatibility with elastomer: 70 ACM 121433	confirmed
Compatibility with elastomer: 75 FKM 585	confirmed
Compatibility with elastomer: 75 FKM 153740	confirmed
Compatibility with elastomer: 75 FKM 260466	confirmed
Compatibility with elastomer: 85 FKM 285180	confirmed
Compatibility with elastomer: 88 FKM 801690	confirmed
Compatibility with elastomer: 72 NBR 902	confirmed
Compatibility with elastomer: HNBR	confirmed
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 110 mm <sup>2</sup> /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 14 mm <sup>2</sup> /s
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	330 x 0.1 mm
Drop point, DIN ISO 2176, IP 396	>= 250 °C
Corrosion inhibiting properties of lubricating greases, DIN 51802, (SKF-EMCOR), test duration: 1 week, distilled water	<= 1 corrosion degree
Flow pressure of lubricating greases, DIN 51805, test temperature: -40 °C	<= 700 mbar
Water washout test, ASTM-D 1264, grease loss, 1h/38°C	<= 10 % by weight
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	24 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 80 years.

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