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High temperature, high performance grease – multi-purpose in use, especially for closed systems

Rivolta S.K.D. 4002 is a penetration-stable, water-resistant, high temperature-stable synthetic grease, developed for use in heavily loaded roller and plain bearings. Beside aging-resistant synthetic base oils and a special thickener Rivolta S.K.D. 4002 contains a new additive-system, that offers an optimal compressive strength at all service conditions.

The property

- **use temperature range from -50°C up to +210°C**
- **aging-resistance, penetration-stable**
- **water-resistance**
- **pumpability**
- **minimal wear and friction**
- **no classification necessary according to the German hazardous substances ordinance**
- **biodegradable**

will give the following benefits

- qualified for use in a wide temperature range, optimal at low and very high temperatures with constant good lubrication properties
- long-term use of the lubricant, extended service intervals, reduced maintenance, reduced labour costs
- also qualified for use in damp atmosphere. Excellent protection against corrosion
- good pumpable even at low temperatures because of the favourable flow-pressure-temperature characteristic
- formation of elasto-hydrodynamic lubrication in roller bearings. Metal contact of the rolling and sliding surfaces will be prevented extensively; the life-time of bearings will be extended decisively.
- S.K.D. 4002 stands for a maximum of personal protection. The appropriate use of S.K.D. 4002 does not create any risks for the workers' health. S.K.D. 4002 can also be used in the food industry according to German regulations.
- S.K.D. 4002 is environmentally safe and has the advantage of biodegradability and non-toxicity. This is especially important in those cases where the lubricant can get into the environment.

**Rivolta S.K.D. 4002, the optimal long-term lubricant
for heavily loaded bearings**



High temperature, high performance grease

Synthetic grease of metal soap base with physical-chemical acting additives for the improvement of oxidation and ageing resistance and protection from corrosion and wear.

Colour: beige-opaque

Odour: mild

Technical data	Unit of measurement	Norm	S.K.D. 4002
Density	g/ml	DIN 51757	0.870
Viscosity of base oil at 40°C	mm ² /s	DIN 51562/1	100
NLGI-grade	-	DIN 51818	2
Worked penetration	1/10 mm	DIN ISO 2137	265-295
ΔPW 100,000 Decrease of worked penetration after 100,000 double cycles	1/10 mm		<20
Operative temperature range	°C		-50 up to +210
Dropping point	°C	DIN ISO 2176	>250
Corrosion protection to steel (SKF-Emcor)	corr.-grade	DIN 51802	0 / 0
Corrosion effect on copper	corr.-grade	DIN 51811	1 at 100
Oil separation at 40°C	%	DIN 51817	<1 after 18h
Flow pressure	kPa	DIN 51805	15 at +20°C
	kPa	DIN 51805	55 at -35°C
S.R.V.-Test*		DIN 51834	
Friction coefficient μ	-		0.060 / 0.060
Wear rate ball	mm		0.50 / 0.50
Wear rate disc	μm		<1.00 / <1.00

* Swing friction wear tester, temperature loading rises from 50°C to 100-150-180-210°C at 2600 N/mm² with 1,000,000/500,000 load changes

Applications

heavily loaded ball-, roller- and needle roller bearings at extreme low and extreme high temperatures, e.g.: bearings in evaporate ventilators, frost tunnels, welding machines, drying plants and baker's ovens

bearings in electromotors, ventilators, hot gas ventilators, kilns
rolling bearings in calenders or coating machines
guide rolls of transport chains of textile machines
impellers in oven or autoclave carts
plain bearings at high temperatures

Compatibility

Rivolta S.K.D. 4002 is not aggressive to common metals, paints, plastics. It is compatible with seals resistant to mineral oils. Do not mix with other greases. You can get more information about the use by contacting our department of technical support.

Preparing of lubrication point

Remove contaminations and residues as good as possible.

This text contains facts and statements and is determined with our best knowledge and will be checked continuously. These statements are depending - among other reasons - on experiences gained in the industry. We only pass them on without liability. Before using our products you should test the applicability and you should convince yourself about the satisfactory performance. Our application examples and suggestions should not request to violate patent rights.