MOLYKOTE® U-N Paste

Solid lubricant paste with synthetic carrier oil

Features & benefits

- Dry lubrication up to 450°C
- Reduced friction and wear
- Low coefficient of friction
- High load-carrying capacity
- Compatible with some types of natural rubber and plastics (testing for compatibility required before use)

Composition

- Polyalkylene glycol oil
- Lithium soap
- Solid lubricants

Applications

For assembling, running-in and permanent lubrication of components that are subjected to high temperatures. MOLYKOTE® U-N Paste is suitable for the dry lubrication of bearings (low rotary speeds), slideways and joints that are subjected to temperatures exceeding 200°C; at higher temperatures, the carrier volatilizes, leaving virtually no residue, and the remaining dry anti-friction film alone takes over the only lubrication up to +450°C – even beyond this in a protective gas atmosphere. As the paste has a synthetic oil base, it is also suitable for lubricating construction elements that consist of materials that are not resistant to mineral oils. Used successfully for roller and sliding bearings of foundry ladles and converter bearings in steel works, conveyor and driving rollers of belt conveyors, in the bearings of furnace and shuttle kilns, chains and chain conveyor rollers, for joints of ironing presses, for O-rings that are not resistant to mineral oils, lip seals, rubber and cup leathers.

How to use

Clean the contact areas. Uniformly rub the paste in, using a hard brush, cloth, plastic sponge or window leather. Remove excess paste.

Clean the roller bearing with petroleum spirit. Before assembling, lightly apply this product without using excess between the roller elements on the bearing races. Then move the bearing slightly so that a thin sliding film is produced.

If required, roller bearings that have already been treated with this product by the manufacturer can be supplied.

Typical properties

Specification writers: These values are not intended for use in preparing specifications. Please contact your local MOLYKOTE® sales representative prior to writing specifications on this product.

Standard[1]	Test	Unit	Result
	Color		Black
Penetration, density			
ISO 2137	Unworked penetration	mm/10	250-280
ISO 2811	Density at 20°C (68°F)	g/ml	1.7
Temperature			
	Service temperature[2]	°C	-40 to +450 up to 630 with restricted air
Load-carrying capacity, wear protection, service life			
	Four-ball tester		
DIN 51 350 pt.4	Weld load	N	3,800
DIN 51 350 pt.5	Wear scar under 800 N load	mm	0.8
	Almen-Wieland machine		
	OK load	N	18,000
	Frictional force	N	3,160
Coefficient of friction			
	Press-fit test	μ	0.09, no chatter
Oil separation - evaporation			
DIN 51 817	Oil separation	%	0.7

[1] ISO: International Standardization Organization. DIN: Deutsche Industrie Norm.
[2] Temperature limit of solid lubricants.

Handling precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

Usable life and storage

When stored between 0°C and 40°C in the original unopened containers, this product has a usable life of 60 months from the date of production.

Packaging

This product is available in different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

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