

## MOLYKOTE® D 321 R

### ANTI-FRICTION COATING

#### Air-curing dry lubricant

#### FEATURES

- ◆ Air drying
- ◆ Avoidance of stick-slip
- ◆ High ageing resistance

#### COMPOSITION

- ◆ Solid lubricants
- ◆ Solvents
- ◆ Binder

#### APPLICATIONS

- ◆ For metal/metal combinations with slow to medium fast movements and high loads.
- ◆ Suitable for the permanent lubrication of highly stressed sliding guides with low sliding speeds, oscillating movements or intermittent operation.
- ◆ Improving the running-in process and for lubrication under high vacuum and at extreme temperatures.
- ◆ Used successfully for cylinder-head bolts, toaster guides, car mirror adjustment mechanisms, high voltage switches, for the running-in of highly stressed gear wheel.
- ◆ Emergency lubricant for parts of the rotor head of wind energy installations and for groove-free cold extrusion of steel.

#### TYPICAL PROPERTIES

Specifications writers: These values are not intended for use in preparing specifications. Please contact Dow Corning GmbH, Wiesbaden, Germany before writing specifications on this product.

Standard*	Test	Units	Result
	Colour		Grey-black
	<b>Physical properties</b>		
DIN 53211/3	Viscosity at 20°C (DIN3 cup)	s	
DIN 53217/2	Density at 20°C	g/ml	1.07
CTM 0242 I	Nonvolatile content	%	29
	Storage life	months	24
	<b>Temperature</b>		
	Curing time	min/°C	5/23
	Service temperature range	°C	-180 to +450
	<b>Load-carrying capacity, wear protection, service life</b>		
ASTM-D2625	Falex load-carrying capacity <sup>1</sup>	N	b =4500 p=12500 s=6800
ASTM-D2714	LFW-1, rotating <sup>1</sup> F=2860 N, n=72 min <sup>-1</sup> , v=7.9 m/minutes no. of revolutions x1000 to μ=0.1		b = 212 p=146 s=306
ASTM-D2714	LFW-1, oscillating <sup>1</sup> F=900N, frequency=89.5osc./minutes no. of oscillations to μ=0.08		b = 178 p = 400 s = 362

## TYPICAL PROPERTIES (continued)

Standard*	Test	Units	Result
	<b>Coefficient of friction</b>		
	Press-Fit test, $\mu =$		0.075

1. Surface pretreatment: b = blank, p = phosphated, s = sand blasted.

\* CTM: Corporate Test Method, copies of CTMs are available on request.

ASTM: American Society for Testing and Materials.

DIN: Deutsche Industrie Norm

### HOW TO USE

#### Surface preparation

First clean and degrease the surface which will be coated with MOLYKOTE D 321 R Anti-Friction Coating. Phosphatization or sandblasting (180 grid) increases the adhesion and service life.

#### How to apply

Stir the Anti-Friction Coating thoroughly before applying by spraying or brushing.

Recommended dry film thickness:  
5 to 20 $\mu$ m.

#### Curing

5 minutes at 23°C

#### Solubility

Thinning can be carried out using MOLYKOTE® L13 Thinner.

### HANDLING PRECAUTIONS

A Product Safety Data Sheet should be obtained from your nearest Dow Corning sales office prior to use.

ATTENTION: Before handling, read product information, Product Safety Data Sheets and container labels for safe use, and any physical and/or health hazard information.

### USABLE LIFE AND STORAGE

When stored at or below 20°C in the original unopened containers MOLYKOTE D 321 R Anti-Friction Coating has a usable life of 24 months from the date of production.

Dow Corning will guarantee the usable life of MOLYKOTE D 321 R Anti-Friction Coating until the date indicated on the packaging. This date is shown by the letters "EXP" (meaning Expiry) followed by 4 digits, which stand for the month (last day) and year. Example: "EXP 03/99" means use by 31 March 1999.

### PACKAGING INFORMATION

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

### LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

### HEALTH AND ENVIRONMENTAL INFORMATION

Dow Corning's Health, Environment and Regulatory Affairs (HERA) Department is available to support customers for their product safety needs. For further information, you can contact this group at:

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