

MOLYKOTE® 1000

SOLID LUBRICANT PASTE

Solid lubricant paste for bolted metal joints; contains no lead or nickel

FEATURES

- ◆ Can be used over a wide range of temperature (-30°C to +650°C)
- ◆ High load-bearing capacity
- ◆ Enables non-destructive dismantling, even after long use at high temperatures
- ◆ Coefficient of friction unchanged in the area of oiled bolts, even after several bolt re-tightening and loosening processes
- ◆ Good corrosion protection

COMPOSITION

- ◆ Solid lubricants
- ◆ Mineral oil
- ◆ Thickener
- ◆ Powdered metal

APPLICATIONS

- ◆ Suitable for bolted joints that are subjected to high temperatures up to 650°C and to corrosive effects, and which, after assembling and the initial operation, have to be re-tightened or disconnected. In order to ensure constant pre-stressing forces, uniform and steady coefficients of friction of the lubricant are necessary.
- ◆ Used successfully for cylinder head bolts, nozzle head screws of plastic injection moulding machines, bolted joints in the chemical industry, and also for the tension rings of centrifuges.

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		Brown
	Penetration, density		
ISO 2137	Unworked penetration	mm/10	280-310
ISO 2811	Density at 20°C	g/ml	1.26
	Temperature		
	Service temperature ¹	°C	-30 to 650
	Load-carrying capacity, wear protection, service life		
	Four-ball tester		
DIN 51 350 pt.4	Weld load	N	4800
DIN 51 350 pt.5	Wear scar under 400N load Almen-Wieland machine	mm	0.08
	OK load	N	20000
	Frictional force	N	2600
	Coefficient of friction		
	Screw test - μ thread ²		0.13
	Screw test - μ head		0.08
	Initial break-away torque ³	Nm	135
DIN 51 802	SKF-Emcor method		1

1. Temperature resistance of solid lubricants.

2. Coefficient of friction in bolted connection, M12, 8.8, on blackened surface.

3. M 12, with starting torque $M_a = 62$ Nm and heat treatment at 540°C, 21 h, bolt material: no. 1.7709.

* ISO: International Standardisation Organisation

DIN: Deutsche Industrie Norm

HOW TO USE

How to apply

If possible, clean the thread and the bolt with a wire brush. Spread an adequate amount of the paste on the thread, right up to its root in order to obtain a good seal. In order not to alter the properties, the paste must not be mixed with grease or oils.

To enable this product to be applied more quickly and cleanly to larger areas, it is advisable to use the spray can.

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 this product has a usable life of 60 months from the date of production.

Dow Corning will guarantee the usable life of this product 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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