

Product Information

Specialty Lubricants

DOW CORNING

MOLYKOTE® 1000

Solid lubricant paste

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

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

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 molding machines, bolted joints in the chemical industry, and also for the tension rings of centrifuges.

TYPICAL PROPERTIES

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

Standard*	Test	Unit	Result
	Color		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	mm	0.08
	Almen-Wieland machine		
	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

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE FROM YOUR LOCAL DOW CORNING SALES REPRESENTATIVE.

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.

PACKAGING

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

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Health, Environment and Regulatory Affairs

specialists available in each area.

For further information, please consult your local Dow Corning representative.

WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. Dow Corning specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Unless Dow Corning provides you with a specific, duly signed endorsement of fitness for use, Dow Corning disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.