

Specialty Lubricants

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/-22°F to +650°C/1202°F)
- High load-carrying 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 (1202°F) 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 (68°F) | g/ml | 1.26 |
| | Temperature | | |
| | Service temperature ¹ | °C | -30 to 650 |
| | | °F | -22 to 1202 |
| | 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 $M_a = 62\text{Nm}$ and heat treatment at 540°C (1004°F), 21h, 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 material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

USABLE LIFE AND STORAGE

When stored at or below 20°C (68°F) 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 Product

Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

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