# **Product Information**

# Specialty Lubricants

### DOW CORNING

# **MOLYKOTE® P 37 Lubricant paste**

#### **FEATURES**

- Highly pure (less than 500mg of sulphur, less than 200mg of chlorine and fluorine per kg of lubricant)
- Can be used at temperatures up to 1400°C (2552°F)
- Coefficient of friction in the range of oiled bolts
- Low scatter of prestressing force on tightening
- Avoidance of stress cracks and solder brittleness
- Enables non-destructive loosening of bolted joints even after long use at high temperatures

#### **SPECIFICATIONS**

- Complies with Siemens TLV 9600 02/01
- Complies with General Electric TIL 1117-3RI
- Complies with EDF-PMUC 04034
- Complies with Pratt & Whitney PWA-36246

## **COMPOSITION**

- Solid lubricants in practically sulphur free, partly synthetic oil
- · Thickener
- Adhesion improver

# Extremely pure, solid lubricant paste for bolted joints. It contains no lead, nickel, sulphur, chlorine or fluorine

#### APPLICATIONS

- Suitable for screws, nuts and bolts that are subjected to extremely high temperatures and which are made of heat-resistant or extremely heat resistant steels, eg those made from nickel-based alloys.
- Used successfully for the bolted joints of gas and steam turbines in power stations.

#### 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		Grey-Black
	Penetration, density		
ISO 2137	Unworked penetration	mm/10	280-310
ISO 2811	Density at 20°C (68°F)	g/ml	1.2
	Temperature		
	Service temperature <sup>1</sup>	$^{\circ}\mathrm{C}$	-40 to 1400
		°F	-40 to 2552
	Load-carrying capacity, wear	protection, ser	vice life
DIN 51 350 T.4	Weld load	N	4400
DIN 51 350 T.5	Wear scar under 800N load	mm	1.7
	Coefficient of friction		
	Screw test - μ thread <sup>2</sup>		0.15
	Screw test - μ head <sup>2</sup>		0.09
	Initial break-away torque <sup>3</sup>	Nm	126

- 1. Temperature resistance of solid lubricants.
- 2. Coefficient of friction in bolted connection, M12 x 1.75, material 8.8, blackened.
- 3. M 12 x 1.75, with starting torque Ma = 56 Nm and heat treatment at 540°C (1004°F),
- 21 hours, bolt material: 21 Cr Mo Ni V 57 mat no. 1.7709.

#### **HOW TO USE**

### How to apply

Clean the thread with solvent. Clean already used bolts with a wire brush. Spread an adequate amount of this product up to the root of the thread in order to obtain a good seal. For this purpose use the brush from the brush can, provided it has not been used previously for other purposes. Otherwise use a new brush.

## 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 Health, Environment and Regulatory Affairs specialists available in each area.

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

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