ROCOL®

Performance you can trust

Technical Data

Dry Moly Paste

Dry film coating of molybdenum disulphide in paste form

Description

ROCOL® Dry Moly Paste provides a very high content molybdenum disulphide film. It is designed to lubricate sliding mechanisms such as plain bearings, pins, cams and slides where a wet lubricant cannot be tolerated.

Molybdenum disulphide (MoS2) is a great lubricator and very resistant to high loads.

Also available in as an aerosol – see Dry Moly Spray
And solvent based liquid form – see Dry Moly Fluid.

Applications

- Plain Bearings
- Slides / Sliding mechanisms
- Screws
- Pins
- Cams
- Chains
- Fasteners / bolting arrangements
- Splines
- Keyways
- Gearing

Approvals

NATO Stock numbers;
8030992247380 (100g)
8030992247382 (750g)
Approved for use within RAF, reference number;
34D2247380 (100g)
34D2247382 (750g)
Rolls Royce Specification – R-R OMAT 4/53
British Rail Catalogue number – 27026001

Features & Benefits

- Outstanding wide temperature range -50°C to +450°C
- Dry Film lubricant – resists pick up of contaminants such as dust and debris etc
- Prevents pick up and
- Excellent wear resistance
- Resists high loads
- Eases dismantling of assemblies
- Improves co-efficient of friction, see page 3 for details.

Directions For Use

For best practice the torage temperature should be between 1°C and 40°C and kept out of direct sunlight.

Shelf life is 5 years from date of manufacture.

Ensure surfaces are clean, dry and free from oil or contaminants

Apply a thin even coating by rubbing on to the surface with a lint free cloth

The applied film can be improved by lightly burnishing in with a lint free cloth

Further Information

For pack sizes, part codes and safety data sheets please visit www.rocol.com or get in touch with our customer service team who will be happy to help: customer.service@rocol.com

T +44 (0) 113 232 2600 **F** +44 (0) 113 232 2740
E customer.service@rocol.com **www.rocol.com**
ROCOL House, Swillington, Leeds LS26 8BS

ROCOL® A division of ITW Ltd

bsi. ISO 9001 Quality Management FM 12448 | AS/EN 9100 Series Aerospace FM 667905 | ISO 14001 Environmental Management EMS 67596 | OHSAS 18001 Occupational Health and Safety Management OHS 78173

INVESTORS IN PEOPLE

ROCOL®

Performance you can trust

Technical Data

Dry Moly Paste

Dry film coating of molybdenum disulphide in paste form

Property	Test Method	Result
Appearance	Visual	Smooth blue-black paste
NLGI No.	IP 50 – ASTM D217	3
Base Type	N/A	Hydrocarbon blend
Solids	N/A	Molybdenum disulphide
Solids Content	N/A	50%
Temperature Range	N/A	-50°C to +450°C
Drop Point	IP 132	>100°C

Values quoted above are typical and do not constitute a specification.

Issue 3 Date: 12/20

T +44 (0) 113 232 2600 **F** +44 (0) 113 232 2740
E customer.service@rocol.com **www.rocol.com**
ROCOL House, Swillington, Leeds LS26 8BS

Dry Moly Paste

Dry film coating of molybdenum disulphide in paste form

Torque Settings of Fasteners

When a thread compound is applied to a fastener that will be torque tightened, the torque setting will require adjustment to achieve the correct tension in the fastener. Correct torque settings can be calculated using the methods below.

The following parameters were derived from the tension-torsion relationship measured on M12 x 50mm setscrews with 1.75mm thread pitch, full nut and Form A washers. Fasteners were degreased and a thin layer of thread compound applied in line with instructions on Page 1. Data are for fasteners at 90% of the yield stress:

Fastener Material	Coefficient of Friction (μ)	K-Factor
8.8 Steel Plain Finish	0.092	0.13
8.8 Steel BZP	0.085	0.12
8.8 Steel Hot Dip Galvanised	0.125	0.17
304 Stainless Steel	0.113	0.15
Aluminium 6061	0.086	0.12

$$T = F \times \left[(0.159 \times P) + (0.577 \times d \times \mu) + (D_f \times \frac{\mu}{2})\right]$$

T = *Torque Applied (Nm)*
F = *Tension Generated in Fastener (N)*
P = *Thread Pitch (m)*
d = *Pitch Diameter (m)*
D_f = *Nut Friction Diameter (m)*
μ = *Coefficient of Friction*

$$T = K \times F \times D$$

T = *Torque Applied (Nm)*
F = *Tension Generated in Fastener (N)*
D = *Nut Nominal Bolt Diameter (m)*
K = *K-Factor*

Many parameters affect the tension-torsion relationship of fasteners, including: Bolt geometry, surface finish, lubricant application method, joint material, torque application method, variation in fastener manufacture etc. Therefore, these parameters above are for guidance only, especially if a different material is used or if geometry is significantly different to M12. Any calculated values are a predictive tool and the final tension should be verified, especially in critical applications. These values do not constitute a specification.

T +44 (0) 113 232 2600 **F** +44 (0) 113 232 2740
E customer.service@rocol.com **www.rocol.com**
ROCOL House, Swillington, Leeds LS26 8BS