# Product Information Specialty Lubricants

# Molykote® G-n Metal Assembly Paste and Molykote® G-n Metal Assembly Spray

#### **FEATURES & BENEFITS**

- Excellent protection against fretting wear and corrosion
- Extends service life
- Low friction
- Lubricate beyond the yield point of most metals in boundary applications, reducing wear and helping to prevent seizing, galling and excessive friction
- Aid run-in and reduce frictional force and surface damage
- Low coefficient of friction allows for effective conversion of torquing force into holding force; reduces the force required for disassembly of threaded fasteners

#### COMPOSITION

 Solid lubricants in mineral oil (with non-chlorofluorohydrocarbon propellant in aerosol) Extreme-pressure lubricant for assembly, press fitting, threaded connections, running-in and maintenance

#### **APPLICATIONS**

*Molykote*<sup>®</sup> G-n Metal Assembly Paste lubricates surfaces subjected to extreme pressures. Specific applications include:

- Running-in lubricant for new or rebuilt equipment, such as gears, splines, journal bearings, cams and ways
- Metalworking helps prevent galling, welding and metal pickup on tools and dies in machining, stamping, and drawing operations, tube bending, thread rolling, cold heading, swaging and forging
- Assembly lubricant reduces torque in tightening threaded fasteners and tension variation from bolt to bolt; eases disassembly and reduces chance of damage
- Helps prevent fretting wear and corrosion, and cold welding of bearing shafts, bushings and splines
- Press-fitting lubricant allows press fitting without chatter or stick-slip in most cases; reduces the force required for interference fitting and minimizes distortion

*Molykote*<sup>®</sup> G-n Metal Assembly Spray is primarily designed as a running-in lubricant for plain bearings, splines, gears, cams and ways, and because of its low coefficient of friction, as a lubricant for movable screws, threaded spindles and lead screws. It can also be used wherever protection against friction and high load conditions is needed, where burnishing is impractical, or where a paste in aerosol form is desired. It is suitable for airframe and aircraft engine applications.

#### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test	Property	Unit	Result	
	Appearance		Buttery, grainy	
	Color		Gray-black	
CTM <sup>1</sup> 0300	Consistency, penetration, unworked	mm/10	300	
	Specific Gravity		1.33	
	Approximate Service Temperature Range,			
	Solid Lubricant	°F (°C)	0 to 750 (-18 to 399)	
	Base Oil	°F (°C)	0 to 250 (-18 to 121)	
CTM 0394	Coefficient of Friction <sup>2</sup>		0.08	
CTM 0351	Four Ball Wear Scar	mm	0.76	

#### CONTINUED TYPICAL PROPERTIES TABLE

Test	Property	Unit	Result
	(80 kg, 1 hour, 1200 rpm, steel vs. steel)		
CTM 0172	Four-Ball Weld Load	kg (lb)	499 (1100)
	Effect on Copper Strip,		#1, No discoloration
	after 2 hours at 212°F (100°C)		

<sup>&</sup>lt;sup>1</sup>CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances. Copies of CTMs are available upon request.

#### DESCRIPTION

Molykote G-n Metal Assembly Paste is a multi-purpose, heavy duty lubricating paste containing a blend of molybdenum disulfide and white solid lubricants in a mineral oil. It helps prevent galling during run-in, helps extend the service life of moving parts, and helps protect against fretting wear and corrosion as well as welding of static joints.

Molykote G-n Metal Assembly Spray is a high-performance paste in aerosol form. It is particularly effective as a running-in lubricant. This product features a low coefficient of friction immediately upon application, without burnishing.

#### **HOW TO USE**

Molykote G-n Metal Assembly Paste can be applied in a thin film to clean surfaces by either of the following methods:

- Burnishing Rub on with a clean, lint-free cloth.
- Brushing Brush on, preferably using a brush with short, stiff bristles.

Molykote G-n Metal Assembly Spray should be applied in a sweeping motion to obtain a thin, uniform coating. Avoid overapplication. No burnishing is required, and although best results are obtained on clean, dry surfaces, Molykote G-n Metal Assembly Spray can also be applied on oily surfaces. The lubricant's solvent evaporates within 30 minutes.

## USABLE LIFE AND STORAGE

When stored at or below 77°F (25°C), *Molykote* G-n Metal

Assembly Paste has a useable life of 60 months from date of manufacture. An oil layer may form on the product surface during storage but may be readily mixed back in by stirring.

When stored at or below 77°F (25°C), *Molykote* G-n Metal Assembly Spray has a useable life of 60 months from date of manufacture. Because it is an aerosol, punctures should be avoided, and containers should be kept away from heat, sparks and open flame.

## 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**

When used on threaded fasteners, mineral oil torquing specifications should be reduced by one-third to avoid over tightening. *Molykote* Gn Metal Assembly Paste is not recommended for use in pressure lines and grease guns. This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

#### SHIPPING LIMITATIONS

*Molykote* G-n Metal Assembly Paste – None.

*Molykote* G-n Metal Assembly Spray – DOT Classification: Extremely flammable.

### 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, dowcorning.com or consult your local Dow Corning representative.

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## LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is

<sup>&</sup>lt;sup>2</sup>LFW-4 Press-Fit Test: steel vs. steel; velocity 0.6 in/min, 10,000 psi, room temperature.

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 our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. Dow Corning's sole warranty is that our products will meet the 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.

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