

MOLYKOTE® G-n Metal Assembly Paste and MOLYKOTE® G-n Metal Assembly Spray

Extreme-pressure lubricant for assembly, press fitting, threaded connections, running-in and maintenance

Features & benefits

- Excellent protection against fretting wear and corrosion
- Extend 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)

Applications

MOLYKOTE® 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® 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

Typical properties

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

Standard ⁽¹⁾	Test	Unit	Result
	Appearance		Buttery, grainy
	Color		Gray-black
CTM 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 ⁽²⁾		0.08
CTM 0351	Four Ball Wear Scar (80 kg, 1 hour, 1,200 rpm, steel vs. steel)	mm	0.76
	Four-Ball Weld Load	kg (lb)	499 (1,100)
CTM 0172	Effect on Copper Strip, after 2 hours at 212°F (100°C)		#1, No discoloration

⁽¹⁾CTMs (Corporate Test Methods) correspond to standard ASTM tests in instances. Copies of CTMs are available upon request.

⁽²⁾LFW-4 Press-Fit Test: steel vs. steel; velocity 0.6 in/min, 10,000 psi, room temperature.

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.

Description

MOLYKOTE® G-n Metal Assembly Paste is a multipurpose, 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 over-application. 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.

Handling precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

*DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted.
© 1997-2020 DuPont.*

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

Usable life and storage

When stored at 32°F to 104°F (0°C to 40°C), MOLYKOTE® G-n Metal Assembly Paste has a usable 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 32°F to 104°F (0°C to 40°C), MOLYKOTE® G-n Metal Assembly Spray has a usable life of 24 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

These products are available in different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

Limitations

When used on threaded fasteners, mineral oil torquing specifications should be reduced by one-third to avoid overtightening. MOLYKOTE® G-n Metal Assembly Paste is not recommended for use in pressure lines and grease guns.

Shipping limitations

MOLYKOTE® G-n Metal Assembly Paste – None.

MOLYKOTE® G-n Metal Assembly Spray – DOT Classification: Extremely flammable.