



MOLYKOTE® G-5008 Dielectric Grease

Silicone base oil containing specially formulated solid lubricants

Features & benefits

- Physical form – light-consistency grease
- Wide service-temperature range
- Compatible with rubber and ceramics
- Excellent dielectric properties

Applications

MOLYKOTE® G-5008 Dielectric Grease is designed primarily for rubber/ceramic and rubber/rubber applications such as automotive spark plug boots and electrical connectors.

Description

MOLYKOTE® G-5008 Dielectric Grease is a silicone grease containing a specially formulated base oil and solid lubricants. It has excellent dielectric properties that are maintained when the material is exposed to temperatures above 200°C (392°F) for extended periods. It also inhibits bonding of rubber to ceramic.

How to use

MOLYKOTE® G-5008 Dielectric Grease has been designed for use in automated dispensing equipment in which precise metering is required.

This product can also be applied using a brush or a grease gun.

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.

Usable life and storage

MOLYKOTE® G-5008 Dielectric Grease can be stored for 60 months from date of manufacture at ambient temperatures in its original, closed container.

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
	Color		Yellow-green
	NLGI class		2-3
ASTM D217	Penetration, unworked	mm/10	240-280
ASTM D1403	Penetration, worked 60 (1/2 scale)	mm/10	251
ASTM D445	Apparent viscosity at -17°C (0°F)	cSt	52000
DIN 51810-1	Dynamic viscosity CP25, Shear Rate=500 1/s, T=25°C	mPa*s	5000
AMS8660	Bleed, 30 hours at 204°C (399°F)	%	2.0
AMS8660	Evaporation, 30 hours at 204°C (399°F)	%	1.1
ASTM D471, AMS8660	Volume change rubber SRE-NBR-28/PX	%	+0.7
ASTM D2240	Durometer hardness Delta (80 Shore A)		+1
AMS8660	Flammability	Pass/Fail	Pass
AMS8660	Corrosive effects (metals)	No evidence	Pass
ASTM D1478	Low temp torque, -4°F (-20°C)		
	Starting torque	gm-cm	361
	Running torque, 60 minutes	gm-cm	134
ASM8660	Waterproof seal 25°C for 24 hours	Pass/Fail	Pass

⁽¹⁾ASTM: American Society for Testing and Materials. AMS: Aerospace Materials Specifications. DIN: Deutsche Industrie Norm.

Continued on following page.

Typical properties, cont.

Standard ⁽¹⁾	Test	Unit	Result
ASTM D149, AMS8660	Dielectric strength, 50 mil	volts/mil	350
ASTM D257, AMS8660	Volume resistivity		
	@ 23°C, 500VDC	ohm-cm	1.02 x 10 ¹⁴
	@ 177°C, 500VDC	ohm-cm	9.60 x 10 ¹³
ASTM D495, AMS8660	Arc resistance (mean)	Seconds	123
ASTM D150, AMS8660	Dielectric constant		
	1 kHz		2.60
	1 MHz		2.70
	10 MHz		2.68
ASTM D150, AMS8660	Dissipation factor		
	1 kHz		0.0074
	1 MHz		0.0008
	10 MHz		0.0010
ASTM D5470 (TIM)	Thermal conductivity @ 30°C	W/mK	0.250
ASTM E2716	Specific heat		
	@ 50°C	J/(g°C)	1.242
	@ 100°C	J/(g°C)	1.333
	@ 150°C	J/(g°C)	1.381

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Packaging

This product is available in different standard container sizes as shown on molykote.com. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

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