MOLYKOTE® G-5133M Wide Temperature Range Grease

Extreme low- to high-temperature-range grease for dynamic applications under various operating conditions

Features

- Expanded extreme low- to high-thermal range (-73°C to 220°C)
  - Opens design options for applications that require improved consistency of performance at wide temperature ranges
  - Potential for consolidation of greases into one solution
- Improved oxidative stability and shear stability with potential for extended lifetime
- Reduced bleed (<3%), evaporation (<3%) and volatilization for use in applications that require low outgassing or minimized fogging
- Expanded material breadth compatible with most elastomers and polymers and select metal/metal applications
- No intentional polytetrafluoroethylene (PTFE) or per- and polyfluoroalkyl substances (PFAS)

Composition

- Silicone fluid
- Organic thickening system

Applications

Polymer/polymer; polymer/metal; metal/metal; elastomer sealing and lubrication. Motor actuator bearings, freezer bearings, oven bearings, exhaust fan bearings. Roller and conveyer equipment, control cables, photographic equipment, optical equipment, measurement equipment, slides, guides, valves. Refrigeration and freezer applications.

How to use

Clean points of application. As is usual with lubricating greases, apply or fill by means of a brush, spatula or automatic lubrication device.

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.

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	Test	Unit	Result
	Color		Off-white
Base performance			
ASTM 7042	Base oil viscosity at 25°C, kinematic	cSt	100
ISO 2137	Worked penetration at 60 strokes	mm	260-300
ISO 2137	Worked penetration at 100,000 strokes	mm	260-330
ISO 2811	Density at 25°C	g/ml	0.98
Thermal			
ASTM D6184	Oil bleed, 24 hours at 200°C	%	<3%
ASTM D6184	Evaporation, 24 hours at 200°C	%	<3%
ASTM D2265	Dropping point	°C	>250
ASTM D1478	Low temperature torque test at -73°C		
	Initial breakaway	mN·m	145
	Running	mN·m	30
ASTM D942	Oxidation resistance	mbar	0
Additional properties			
ASTM D130	Copper corrosion	Rating	1b
ASTM D6138	EMCOR DI water	Rating	1
ASTM D1264	Water washout	%	<2%
AMS8660	Dielectric constant 1KHz		2.7
AMS8660	Dissipation factor 1KHz		0.001

(1)ASTM: American Society for Testing and Materials. AMS: Aerospace Material Specifications. ISO: International Standardization Organization.

Usable life and storage

When stored between 0°C and 40°C in the original unopened containers, MOLYKOTE® G-5133 Wide Temperature Range Grease has a usable life of 36 months from the date of production.

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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