

Electrolube® SGB

Contact Treatment Grease

DESCRIPTION

Electrolube® SGB (2GX Grease) was developed as an extension of the No 2 Range (SGA and SOA) with increased plastics compatibility. This product development was necessary due to the use of thermoplastics in the electronics and automotive industries. **SGB** will significantly increase contact performance and lifetime. Separate data sheets are available for the diluted oil (EML), oil (SOB) and the low penetration grease (SGBH).

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- Improves contact performance by increasing effective contact area
- Enhanced plastics compatibility; suitable for a range of plastics and rubbers (testing advised)
- Highly stable synthetic material, fully inhibited against oxidization and copper corrosion
- Excellent penetration and cooling properties; prevents arcing, thus reduces contact wear

APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes
NATO Stock No.	
Bulk (1 kg)	6850-99-075-6602
Aerosol (200 mL)	6850-99-224-1974
Syringe (20 mL)	6850-99-075-6602

PRODUCT INFORMATION

Please contact your customer service representative for information on available package sizes.

PHYSICAL PROPERTIES

Category	Results
Typical Properties	
Color	Beige
Density (g/mL)	1.11
Temperature Range (°C)	-35 to 130
Vapor Pressure	0.001 Torr @ 20 °C
Evaporation Weight Loss % 7 days 100 °C	3.73
125 °C	3.90
Copper Strip Corrosion (IP154 / ISO 2160)	≤ 1b
Drop Point (IP32 / ISO 2176 (°C))	250
Cone Penetration Worked (ASTM D217, 60 Strokes @ 20 °C)	320
Cone Penetration Un-Worked (ASTM D217) 20 °C	310
-40 °C	180
Consistency (NLGI)	1
Filesdruck (Flow Pressure) (DIN 51805, mbar @ -40 °C)	720
Oil Bleed / Separation (IP121)	6%
Silver Corrosion (DIN 51759, 3 hrs @ 100 °C)	No Change
Plastic Compatibility ABS	Test
PC	Test
Thickener	Clay
Water Content (%)	0.6
UV Trace	No
Electrical Properties	
Breakdown Voltage (BS148 (kV))	4.05
Base Oil Properties	

Category	Results
Base Oil Type	Poly Alkylene Glycol
Base Oil Viscosity (Kinematic Viscosity (cSt))	
40 °C	225
100 °C	37
Base Oil Viscosity Index (ASTM D 2270)	214
Pour Point (ASTM 97 (°C))	-37
Flash Point (COC ASTM D 92 (°C))	214
Mechanical Properties	
4 Ball Wear	2.148
Weld Load	126

APPLICATION GUIDELINES

Before final treatment with our lubricants, contact surfaces should be clean and dry. For general removal of dirt, our Ultrasolve is recommended. Hardened dirt and tarnish, especially on larger contacts, should be removed by rubbing with an abrasive material, which can be impregnated with the lubricant to be used.

After cleaning non-wiping contacts, loosened tarnish should be removed before a final application of lubricant is made. Contact Cleaning Strips (CCS) are recommended for this purpose. With wiping contacts, loosened tarnish will be pushed aside. This can be removed if desired, but is usually not necessary, due to the excellent lubricating and protective properties of the contact lubricant.

SGB can be applied by one of the following methods (although this list is not exhaustive):

Manually by way of a syringe or aerosol (SGB200D)

Semi-automated using syringe dispensing

Fully automated by way of a follower/pusher plate with dispensing system

In production processes, contact lubricant should be applied to the contact components as soon as possible after manufacture or plating to protect against handling contamination and tarnishing.

TYPICAL PRODUCT APPLICATION

SGB can be used on all types of electrical contacts and with most types of thermoplastics. A small area should be tested first to ensure compatibility.

SGB is a non-melting product that will not migrate from vertical surfaces and will provide greater environmental protection than the oil. Thus, the grease is preferable in industrial applications where heavy arcing is common. For example: battery terminals, knife switches, rheostats etc. The grease is also preferable in switches with a very long lifetime and high cycle rate, for example, the automotive switching industry.

ADDITIONAL INFORMATION

Oil separation in greases is a natural occurrence, and small amounts of separation are expected.

Typically, during long term storage, the oil and thickeners will slowly begin to separate. Separation can be accelerated by high temperatures and storage orientation.

If oil separation is observed, we recommend stirring gently with a stainless-steel blade/spatula, in the original packaging, until the grease shows a uniform color and consistency.

Shelf Life: 36 Months

The 12.5 and 25 kg grease drums have parallel sides for use with “follower plate” dispensing equipment for automated manufacturing lines.

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

CONTACT INFORMATION

www.macdermidalpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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