

# Electrolube® CG60

## Contact Grease

### DESCRIPTION

**Electrolube® CG60** Contact Lubricant offers enhanced electrical and mechanical properties under the conditions required by today's automotive and domestic equipment industries. It has been specifically designed for use with a vast array of modern and very sensitive plastics.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### FEATURES AND BENEFITS

- Excellent plastics compatibility; suitable with sensitive plastics (ABS/PC), testing is always advised
- Produces low and constant mV drop and contact resistance; ensures reliability of the contact
- Enhances quality of switch; provides smooth operation and extends switch lifetime
- Provides optimal mechanical resistance and reduces electrical background noise

### APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes

### PRODUCT INFORMATION

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

**PHYSICAL PROPERTIES**

Category	Results
<b>Typical Properties</b>	
Color	Cream
Density (g/mL)	0.85
Temperature Range (°C)	-45 to 130
Evaporation Weight Loss % 7 days @ 100 °C	0.2
% 7 days @ 125 °C	2.1
Copper Strip Corrosion (IP154 / ISO 2160)	≤ 1b
Drop Point (IP32 / ISO 2176 (°C))	200
Cone Penetration Worked (ASTM D217, 60 Strokes @ 20 °C)	320
Cone Penetration Un-Worked (ASTM D217)	
20 °C	300
-40 °C	230
Consistency (NLGI)	1
4 Ball Wear (mm0)	3.264
Weld Load (kgf)	126
Fließdruck (Flow Pressure) (DIN 51805, mbar @ -40 °C)	300
Oil Bleed / Separation (IP121)	5 %
Silver Corrosion (DIN 51759, 3hrs @ 100 °C)	No change
Plastic Compatibility	
ABS	Test
PC	Test
Thickener	Soap
Neutralization Value (mgKOH/g)	0.03
UV Trace	Yes
<b>Base Oil Properties</b>	
Base Oil Type	PAO / Complex Ester

Category	Results
Base Oil Viscosity (Kinematic Viscosity (mm <sup>2</sup> /s))	
40 °C	51
100 °C	8
Pour Point (ASTM D 97 (°C))	-54
Flash Point (COC ASTM D 92 (°C))	260

### APPLICATION GUIDELINES

Before final treatment with our lubricants, contact surfaces should be clean and dry. For general removal of dirt, ULS 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.

CG60 can be applied by one of the following methods (although this list is not exhaustive):

**Manually** by way of a syringe

**Semi-automated** using syringe dispensing equipment

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

### TYPICAL PRODUCT APPLICATION

CG60's unique properties are achieved by a blend of low viscosity base oils, containing anti-corrosion, antioxidant, and metal protection additives, thickened with a complex soap. The use of a complex soap, rather than clay or silica, has the benefit of producing a smoother grease with superior mechanical properties. Therefore, decreased wear and a high quality switch "feel" are provided. In addition to these properties, if the switch is exposed to extremely high temperatures over long periods, forcing the base oil to evaporate, the thickener will not remain as an insulative, abrasive layer on the contact surfaces.

The main applications for CG60 include column switches, rocker switches & push-push switches in the automotive and high quality domestic switch industries. The exceptionally low wear characteristics also make this lubricant ideal for high quality audio applications, providing a very smooth, high quality feel operation.

CG60 has been specifically designed as a lubricant to ensure the low and stable electrical contact resistance across mating metal surfaces, by reducing harmful arcing and increasing the effective surface area of the switch. However, due to the outstanding nature of its mechanical and plastic compatibility properties, it may also be used as a purely mechanical lubricant for plastic / plastic and plastic / metal interfaces.

#### 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

**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](http://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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