

### CG53A

#### Contact Treatment Grease

#### DESCRIPTION

**CG53A** is part of the 'CG' series of Contact Lubricants, designed as an extension of the extremely popular 2X range. The main advantages of these products are reduced contact resistance (even on extremely heavy usage), improved plastics compatibility and improved mechanical lubrication. In addition to providing low and stable contact resistance and improved mechanical lubrication properties, **CG53A** offers superior long term protection to contacts in corrosive environments. It is also an ideal lubricant for high voltage contacts. The plastics compatibility of this grease is very good although, as with all lubricants, it is always advisable to test prior to full scale production.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

#### FEATURES AND BENEFITS

- Excellent resistance to harsh environments; protects contacts from corrosion
- Excellent electrical performance; ideal for high voltage contacts
- Produces low and constant mV drop and contact resistance; ensures reliability of the contact
- Provides optimal mechanical resistance and reduces electrical background noise

#### APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes
NATO Stock No	6850-99-186-8879

#### PRODUCT INFORMATION

For available packaging sizes please visit:

[electrolube.com](http://electrolube.com)

#### PHYSICAL PROPERTIES

Category	Results
<b>Typical Properties</b>	
Color	Cream
Density (g/mL)	0.995
Temperature Range (°C)	-35 to 130
Evaporation Weight Loss % 7 days @ 100 °C	0.42
% 7 days @ 125 °C	1.25
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
Fliessdruck (Flow Pressure) (DIN 51805, mbar @ -40 °C)	320
Oil Bleed / Separation (IP121)	5 %
Silver Corrosion (DIN 51759, 3hrs @ 100 °C)	No change
Plastic Compatibility ABS	Test
PC	Test
Thickener	Lithium Complex Soap
UV Trace	No
<b>Base Oil Properties</b>	
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 D 97 (°C))	-37

Category	Results
Flash Point (COC ASTM D 92 (°C))	214

### 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.

CG53A 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.

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

### TYPICAL PRODUCT APPLICATION

The unique properties of CG53A have been produced by using 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 thickener, rather than clay or silica, has the benefit of producing smoother grease with superior mechanical properties. These include decreasing wear and producing a high quality switch “feel”. In addition, 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 exceptionally low wear characteristics make CG53A ideal for high quality audio and automotive applications, providing a very smooth, high quality feel operation. The use of this lubricant on switches and connectors ensures a very low and stable contact resistance over the long lifetimes required by such industries. CG53A is also used in high voltage applications and protects from harsh environmental conditions that could lead to corrosion.

### ADDITIONAL INFORMATION

**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

To confirm this document is the most recent version, please contact

**TechnicalSupportTeam@hkw.co.uk**

[www.electrolube.com](http://www.electrolube.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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