

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

PHYSICAL PROPERTIES

| Category | Results |
|--|----------------------|
| Typical Properties | |
| 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 |
| Base Oil Properties | |
| 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

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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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