CG53A
Contact Treatment Grease

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.

- 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	**RoHS Compliant (2015/863/EU):**	**Yes**
	NATO Stock Number:	**6850-99-186-8879**

Typical Properties

Colour	Cream
Density (g/ml)	0.995
Temperature Range (°C)	-35 to +130
Vapour Pressure	0.001 Torr @ 20°C
Evaporation Weight Loss (% 7 days @ 100°C)	0.42
Evaporation Weight Loss (% 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 D 217 @ 20°C)	300
Cone Penetration Un-Worked (ASTM D 217 @ -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
Plastic Compatibility - PC	Test
Thickener	Lithium Complex Soap
UV Trace	No

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All information is given in good faith but without warranty. Properties are given as a guide only and should not be taken as a specification.

Electrolube cannot be held responsible for the performance of its products within any application determined by the customer, who must satisfy themselves as to the suitability of the product.

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BS EN ISO 9001:2008
Certificate No. FM 32082

Base Oil Properties

Base Oil Type	Poly Alkylene Glycol
Base Oil Viscosity @ 40°C (Kinematic Viscosity (cSt))	225
Base Oil Viscosity @ 100°C (Kinematic Viscosity (cSt))	37
Base Oil Viscosity Index (ASTM D 2270)	214
Pour Point (ASTM D 97 (°C))	-37
Flash Point (COC ASTM D 92 (°C))	214

Packing	Order Code	Shelf Life	Container Dimension
35ml Syringe	CG53A35SL	48 months	
1 Kg Bulk	CG53A01K	72 months	
5 Kg Bulk	CG53A05K	72 months	
12.5 Kg Bulk	CG53A12.5K	72 months	254mm (inside diameter) x 330mm (height)
25 Kg Bulk	CG53A25K	72 months	305mm (inside diameter) x 406mm (height)

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

Directions for Use

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

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Typical Product Applications

The unique properties of CG53A have been produced by using a blend of low viscosity base oils, containing anti-corrosion, anti-oxidant 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.

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