# Contact Lubricants Technical Data Sheet

# CG71 Contact Treatment Grease

CG71 is particularly applicable for the protection and cleaning of static and moving electrical arc interfaces. It has been specially developed to give a consistently low mV drop throughout the lifetime of the contact/switch. It also provides exceptional oxidation stability and high temperature silver and copper corrosion protection.

CG71 gives exceptionally low wear characteristics and has excellent low temperature performance. This makes it an ideal lubricant for high quality automotive and audio applications. The compatibility of this grease with most grades of plastic is good, although a plastic testing is always advisable prior to full scale production.

- Excellent electrical performance; produces very low and constant mV drop and contact resistance
- · Wide operating temperature range; ideal lubricant for high quality automotive and audio applications
- Enhances quality of switch or contact; provides smooth operation and extends switch lifetime
- Provides optimal mechanical resistance and reduces electrical background noise

RoHS Compliant (2015/863/EU):

Typical Properties	
Colour	Cream
Density (g/ml)	0.85
Temperature Range (°C)	-50 to +130
Evaporation Weight Loss (% 7 days @ 100°C)	0.1
Evaporation Weight Loss (% 7 days @ 125°C)	1.85
Copper Strip Corrosion (IP154 / ISO 2160)	≤1b
Drop Point (IP32 / ISO 2176 (°C))	200
Cone Penetration Un-Worked (ASTM D 217 @ 20°C)	300
Cone Penetration Un-Worked (ASTM D 217 @ -40°C)	220
Cone Penetration Worked (ASTM D217, 60 strokes @ 20°C)	310
Consistency (NLGI)	1
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
Plastic Compatibility - PC	Test
Thickener	Lithium Complex Soap
UV Trace	Yes

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Approvals

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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Yes

#### **Base Oil Properties**

Base Oil Type Pour Point (ASTM D 97 (°C)) Flash Point (COC ASTM D 92 (°C)) PAO / Complex Ester -70 220

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Packing	Order Code	Shelf Life	Container Dimension
35ml Syringe 800g Bulk 20 Kg Bulk	ECG7135SL ECG71800G ECG7125L	36 months 36 months 36 months	114mm (Diameter) x 120mm (Height) 305mm (Diameter) x 406mm (Height)

## 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.

CG71 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 Applications**

The unique properties of CG71 have been produced by using a blend of low viscosity base oils, containing anticorrosion, 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.

CG71 is an ideal lubricant for high quality automotive and audio applications where low contact resistance is required

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