

CG70

Contact Treatment Grease

DESCRIPTION

CG70 Contact Lubricant has been developed to offer enhanced electrical and mechanical properties, whilst being suitable for use with modern (and often very sensitive) plastics and under the more arduous conditions that are required by the leaders in today's automotive industry. In particular, **CG70** provides exceptional performance at low temperatures (down to -55 °C).

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- Exceptional performance at low temperatures; can be used down to -55 °C
- Good plastics compatibility; suitable with some sensitive plastics, 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

APPROVALS

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

PRODUCT INFORMATION

For available packaging sizes please visit:

electrolube.com

PHYSICAL PROPERTIES

Category	Results
Typical Properties	
Color	Cream
Density (g/mL)	0.85
Temperature Range (°C)	-55 to 130
Evaporation Weight Loss % 7 days @ 100 °C	0.19
% 7 days @ 125 °C	2.20
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	310
-40 °C	240
Consistency (NLGI)	1
Fliessdruck (Flow Pressure) (DIN 51805, mbar @ -40 °C)	200
Oil Bleed / Separation (IP121)	5 %
Silver Corrosion (DIN 51759, 3hrs @ 100 °C)	No change
Plastic Compatibility ABS	Test
PC	Test
Thickener	Lithium Complex Soap
Neutralization Value (mgKOH/g)	0.3
UV Trace	Yes
Base Oil Properties	
Base Oil Type	PAO / Complex Ester
Pour Point (ASTM D 97 (°C))	-70
Flash Point (COC ASTM D 92 (°C))	220
Mechanical Properties	
Low Temperature Torque	

Category	Results
-40 °C Static (IP 186 (mNm))	25
-40 °C Dynamic (IP 186 9mNm))	18
-50 °C Static (IP 186 9mNm))	46
-50 °C Dynamic (IP 186 9mNm))	37
4 Ball Wear (mm)	2.462
Weld Load (kgf)	126

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.

CG70 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

The unique properties of CG70 have been produced by using a blend of low viscosity base oils, thickened with a complex soap. The use of an inorganic thickener, rather than clay or silica, has the benefit of producing a 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 main applications for CG70 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.

CG70 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

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

North America 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460	Europe Ashby Park Coalfield Way Ashby de la Zouch Leicestershire, LE65 1JR, UK 44.01530.41960	Asia 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100
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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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