# **Technical Data Sheet**



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# SGA Contact Grease 2G

The Electrolube number 2 range of contact lubricants were developed in response to a requirement for an effective treatment for all types of contacts, particularly in situations where extremes of temperature and environmental conditions are encountered. This range includes SGA contact grease and SOA contact oil. SGA is a non-melting grease which will not migrate from vertical contacts or surfaces and will provide greater protection from atmospheric conditions than an oil.

- Excellent lubrication properties; spiral shaped molecules with effective length of 20 Angstrom units
- Produces low and constant mV drop and contact resistance; low evaporative weight loss
- Will loosen tarnish and corrosion, leaving a protective film to prevent further contamination.
- High stable synthetic material; fully inhibited against copper corrosion and contains no silicones.

Approvals	RoHS Compliant (2015/863/EU):	Yes
	NATO Stock No (SGA01K):	6850-99-220-1588
	NATO Stock No (SGA20S):	9150-99-573-8274

#### **Typical Properties**

Colour	Beige
Density (g/ml)	1
Temperature Range (°C)	-40 to +125
Evaporation Weight Loss (% 7 days @ 100°C)	3.17
Evaporation Weight Loss (% 7 days @ 125°C)	3.35
Copper Strip Corrosion (IP154 / ISO 2160)	≤1b
Drop Point (IP32 / ISO 2176 (°C))	267
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)	170
Consistency (NLGI)	1
Fliessdruck (Flow Pressure) (DIN 51805, mbar @ -40°C)	650
Oil Bleed / Separation (IP121)	5%
Plastic Compatibility - ABS	Test
Plastic Compatibility - PC	Test
Thickener	Clay
Neutralisation Value (mgKOH/g)	0.2
Water Content (%)	0.4
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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#### **Electrical Properties**

Loss Tangent (Tan delta 1MHz) 0.03

### **Base Oil Properties**

Base Oil Type	Complex Ester
Base Oil Viscosity @ 40°C (Kinematic Viscosity (cSt))	49
Base Oil Viscosity @ 100°C (Kinematic Viscosity (cSt))	10
Base Oil Viscosity Index (ASTM D 2270)	197
Pour Point (ASTM D 97 (°C))	-54
Flash Point (COC ASTM D 92 (°C))	>200

<u>Packing</u>	Order Code	Shelf Life	Container Dimension
20 ml Syringe 1 Kg Bulk 5 Kg Bulk 12.5 Kg Bulk	SGA20S SGA01K SGA05K SGA12.5K	48 Months 72 Months 72 Months 72 Months	254mm (inside diameter) x 330mm (height)
25 Kg Bulk	SGA25K	72 Months	305mm (inside 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.

SGA 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

Fully automated by way of a follower/pusher plate with dispensing system.

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## **Typical Product Applications**

SGA is suitable for use on all types of electrical contacts including those in corrosive industrial environments and in heavy arcing conditions e.g. large connections, battery terminals, contactors, busbars, knife switches, rheostats, large voltage regulators etc.

SGA may also be used on fixed or moving contacts, edge connectors, turret tuners, plug sockets, switching devices, potentiometers, fuses, small regulators, slip rings, slider/rotary controls, rocker/push-pull edge connectors, valve pins, switchgear and butting contacts.

Care should be taken to ensure that certain paints, rubbers, and thermoplastics are not near the area of the contact. A small area should be tested first to ensure compatibility.

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