

# SOA

Electrolube No. 2 Oil

# **DESCRIPTION**

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. **SOA** is a high quality lubricating oil, suitable for applications where a low viscosity product is required.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

### **FEATURES AND BENEFITS**

- 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**

Standard	Status
RoHS Compliant (2015/863/EU)	Yes
NATO Stock No (SOA55B)	6850-99-220-1930(RAF) 6850-99-096-3372 (Army)

#### **PRODUCT INFORMATION**

For available packaging sizes please visit:

electrolube.com





# **PHYSICAL PROPERTIES**

Category	Results
Typical Properties	
Color	Light Brown
Density (g/mL)	0.98
Temperature Range (°C)	-40 to 155
Evaporation Weight Loss (% 72 hours @ 100 °C)	0.4
Copper Strip Corrosion (IP154 / ISO 2160)	<u>≤</u> 1b
Silver Corrosion (DIN 51759, 3 hours @ 100 °C)	No Change
Plastic Compatibility ABS PC	Test Test
Ash Content (%)	<0.02
Neutralization Value (mg KOH/g)	0.38
Water Content (ppm)	32
Retractive Index (N/D 20)	1.46
UV Trace	No
Kinematic Viscosity @ 100 °C (cSt)	10.4
Viscosity Index (ASTM D 2270:IP 226)	190
Pour Point (ASTM 97 (°C))	-46
Flash Point (COC ASTM D 92 (°C))	242
Surface Tension (dynes/cm @ 20 °C)	34.7
Electrical Properties	
Dielectric Constant (1 MHz)	5
Breakdown Voltage (BS148 (kV)	47
Loss Tangent (Tan Delta 1MHz)	0.002





#### **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.

SOA can be applied by one of the following methods (although this list is not exhaustive):

Manually by way of a syringe/dropper bottle
Semi-automated using syringe dispensing
Fully automated by way of a dispensing system

## TYPICAL PRODUCT APPLICATION

SOA can be used on all types of electrical contacts, but 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.

SOA should be used on contacts that have very low contact forces and in applications where it will not migrate. Typical areas of use are small contacts, brushes, bearings, organ key contacts, jack plugs, push button switches and relays

#### **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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