



Technical Data Sheet

SOB Electrolube 2X Oil

Product Description

The 2X lubricant range was developed as an extension of the No 2 Range (SFA, SGA and SOA) with increased plastics compatibility. These developments were necessary due to the increasing use of thermoplastics in the electronics and automotive industries. SOB will significantly increase contact performance and lifetime. Separate data sheets are available for the diluted oil (EML), standard grease (SGB), the red standard grease (SGBR) and the low penetration grease (SGBH).

Features

- Improves contact performance by increasing effective contact area
- Harmless to most plastics and rubbers
- Contains no silicones, thus reducing switch contamination
- Will loosen tarnish and corrosion and leave a protective film to prevent further contamination
- Prevents arcing, thus reduces contact wear
- Highly stable synthetic material, fully inhibited against oxidation and copper corrosion
- Excellent penetration and cooling properties
- Good mechanical lubrication
- Also available in a non-flammable aerosol (SOB200D).

Approvals **RoHS Compliant (2002/95/EC):** **Yes**

Typical Properties:

Colour	Colourless
Density (g/ml)	1.002
Temperature Range (°C)	-40 to +130
Vapour Pressure	0.001 Torr @ 20°C
Evaporation Weight Loss (% 72 hours @ 100°C)	0.90
Copper Strip Corrosion (IP154 / ISO 2160)	≤1b
Silver Corrosion (DIN 51759, 3 hrs @100°C)	No change
Plastic Compatibility - ABS	Test
Plastic Compatibility - PC	Test
Ash %	< 0.02
Neutralisation Value (mgKOH/g)	0.26
Water Content (ppm)	49
Refractive Index	1.45
UV Trace	No
Type	Poly Alkylene Glycol
Viscosity @ 40°C (Kinematic Viscosity (cSt))	225
Viscosity @ 100°C (Kinematic Viscosity (cSt))	37
Viscosity Index (ASTM D 2270)	220
Pour Point (ASTM D 97 (°C))	-37

Flash Point (COC ASTM D 92 (°C)) 210

Electrical Properties:

Breakdown Voltage (BS148 (kV)) 60

<u>Packing</u>	<u>Order Code</u>	<u>Shelf Life</u>	<u>NATO Stock No.</u>
1kg Bulk	SOB01K	72 months	
5kg Bulk	SOB05K	72 months	6850-99-439-6845
25kg Bulk	SOB25K	72 months	
100ml Aerosol	SOB100D	48 months	
200ml Aerosol	SOB200D	48 months	6850-99-220-1589

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.

In production processes, contact lubricant should be applied to the contact components as soon as possible after manufacture or plating to protect against handling contamination and tarnishing.

Typical Product Applications

SOB can be used on all types of electrical contacts and with most types of thermoplastics. A small area should be tested first to ensure compatibility.

SOB should be used on contacts with very low or high contact pressures and in applications where it will not migrate. For example brushes, commutators, bearings, jack plugs, push button switches, relays etc.

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