

# TECHNICAL INFORMATION



SPI Supplies  
206 Garfield Avenue,  
West Chester, PA 19380, USA

## Silver Filled Conductive Grease 04993-AB

### Product Description:

The Silver Conductive Grease provides maximum electrical and thermal conductivity, proven lubrication properties, and protection from moisture, oxidation, and other environmental hazards. This system utilizes an advanced silicone lubricant that is compatible with metal, rubber, and plastic. It features:

- High electrical conductivity
- Excellent thermal conductivity
- Provides protection against wear
- Remains stable in a wide temperature range; -70 to 485°F (-57 to 252°C)
- Protects against moisture and corrosion
- Very low viscosity vs. temperature change



### Typical Applications:

CircuitWorks Silver Conductive Grease may be used for high and low power applications including:

- Lubrication of Substation Switches or Circuit Breakers
- Heat Dissipation from Transformers
- Low or Medium Speed Sliding Contacts
- Static Grounding on Seals or O-Rings
- Extending the Life of Rotating Switches

## Typical Product Data and Physical Properties

Composition	100% Silver Filled
Material	Silicone Grease
Color	Silver/Gray
Consistency	Smooth Paste
Properties Electrical Conductivity	<0.01 ohm-cm
Thermal Conductivity	50.0 (BTU/HR/Sq.FT/IN/°F)
Operating Temperature	-70 to 485°F
Range	(-57 to 252°C)
Unworked Penetration	210 (ASTM D-1403) 77°F
Worked Penetration	250 (ASTM D-1403, 60 Strokes)
Dropping Point	491°F (255°C) (ASTM D-2266)
Steel on Steel Wear	1.5mm (ASTM D-2266)
Corrosion on Copper	None
Moisture Resistance	Excellent
Chemical Resistance	Excellent
Electrical Conductivity	Excellent
Thermal Conductivity	Excellent
Lubrication Properties	Excellent
Protection from Oxidation	Excellent
Power Rating	High/Low

**Compatibility:**

The Silver Conductive Grease provided by SPI Supplies is generally compatible with metal, rubber, and plastic. As with any compound, compatibility with substrate should be determined on a non-critical area prior to use.

**Surface Preparation:**

For best results, clean parts to be lubricated with an appropriate surface cleaner order to remove any surface contamination which may prevent adequate material contact.

**Thinning:**

Do not attempt to thin.

**Application:**

Syringe: Remove cap and gently press on plunger. Apply the grease directly to surface or use application tip.

Bulk: Apply with brush, spatula, or similar device.

**Clean-Up:**

An appropriate cleaner, compatible with the substrate surface, can be used to remove trace residues. Excess material may also be removed using a wipe such as the [SPI Lint free cotton wipers](#). Silver particles may stain porous materials.

**Warning:**

To avoid shock or possible fire, stop power to any system before applying conductive grease. Insure positive and negative contacts remain isolated. Improper use can result in shorting, arcing, or shock.

**NOTE:**

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. SPI Supplies or its various suppliers and vendors do not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

**Revised: EER**

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