

## Silver Conductive Grease

### Description

8463 is a silver-filled electrically conductive grease. It greatly improves electrical and thermal connections under screw-type pressure. It lubricates, reduces contact resistance, repels moisture, inhibits corrosion, and prevents static buildup.

Use 8463 when you want a lubricating grease that provides superior electrical contact and environmental protection. It is excellent for ground connections, rotating connections, rotary switches, variable capacitors, roller inductors, roller bearings, slip rings, slide connectors and potentiometers.

### Features and Benefits

- *Silver-filled—greatly reduces electrical and thermal resistance*
- *Improves electrical connections between irregular and pitted surfaces*
- *Prevents arching, pitting, hotspots and welds*
- *Inhibits corrosion*
- *Reduces mechanical wear*
- *Broad service temperature of -50 to 200 °C (-58 to 392 °F)*

### Usage Parameters

Properties	Value
Shelf life	5 y

### Temperature Ranges

Properties	Value
Constant service temperature	-50 to 200 °C [-58 to 392 °F]
Storage temperature limits	-10 to 40 °C [14 to 104 °F]

## Properties

Electrical Properties	Method	Value
Volume resistivity ( $\rho_v$ ) <sup>a)</sup>	Mil-Std-883J Method 5011.6	N/E
Volume conductivity ( $\sigma_v$ ) <sup>a)</sup>	Mil-Std-883J Method 5011.6	N/E
Thermal Properties	Method	Value
Thermal conductivity @25 °C [77 °F]	ASTM E 1461	0.46 W/(m·K)
Grease Properties	Method	Value
Evaporation loss, 22 h @165 °C [329 °F]	ASTM D 2595	0.5%
Oil separation, 30 h @165 °C [329 °F]	ASTM D 6184	10%
Dropping point	ASTM D 2265	>304 °C [>579 °F]
Water washout @38 °C [100 °F] <sup>b)</sup>	ASTM D 1264	0.6%
Physical Properties	Method	Value
Color	Visual	Silver
Odor	—	Odorless
Density @25 °C [77 °F]	ASTM D 1475	2.35 g/mL
Viscosity @25 °C [77 °F] <sup>c)</sup>	IPCTM-65- Method 2.4.24.4	1 550 Pa·s
Lubricant	—	Yes
Bleed resistant	—	No
Corrosion resistant	—	Yes
VOC (Volatile Organic Compound)	—	31%

N/E=Not Established

**a)** Value depends on pressure.

**b)** Bearing dried at 77 °C [171 °F].

**c)** Brookfield viscometer at 5 rpm with spindle RV S96.

## Storage

Store between -10 and 40 °C [14 and 104 °F] in dry area.

## Health, Safety, and Environmental Awareness

Please see the 8463 Safety Data Sheet (SDS) for further details on transportation, storage, handling, safety guidelines, and regulatory compliance.

## Application Instructions

### To apply the grease:

1. Wear protective gloves.
2. Clean and dry the surface being lubricated with a lint-free cloth or brush and a zero-residue cleaning solvent, such as MG 824 Isopropyl Alcohol.
3. Apply a thin, even layer of grease using a spatula or other appropriate applicator.

## Packaging and Supporting Products

Cat. No.	Packaging	Net Volume	Net Weight	Packaged Weight
8463-7G	Syringe	3.0 mL [0.10 fl oz]	7.0 g [0.24 oz]	0.02 kg [0.04 lb]

Contact M.G. Chemicals if custom packaging or sizes are required.

## Technical Support

Please contact us regarding any questions, suggestions for improvements, or problems with this product. Application notes, instructions and FAQs are located at [www.mgchemicals.com](http://www.mgchemicals.com).

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