

Description

The 8463 *Silver Conductive Grease* is produced with an extremely temperature stable silicone oil for use between sliding surfaces. The 8463 grease lubricates and help discharge static build up, conducts heat, and protects against corrosion.

Applications & Usages

Typical applications include lubrication of switches or circuit breakers, heat dissipation, and static ground on seals and O-rings.

Features and Benefits

- **Excellent high temperature stability**
- **Safe on plastics**

Usage Parameters

<i>Properties</i>	<i>Value</i>
Shelf Life ^{a)}	5 y

a) Reported shelf life assumes room temperature storage and unopened container.

Temperature Ranges

<i>Properties</i>	<i>Value</i>
Constant Service Temperature	-50 to 200 °C [-58 to 392 °F]
Storage Temperature Limits ^{b)}	-10 to 40 °C [14 to 104 °F]

a) The product must stay within the storage temperature limits stated

Principal Components

Name	CAS Number
Silicone fluid	63148-62-9
Carbon Black (conductive filler)	1333-86-4
Silver (conductive filler)	7440-22-4

Properties

<i>Thermal Properties</i>	<i>Method</i>	<i>Value</i>
Thermal Conductivity @25 °C [77 °F]	ASTM E 1461	~0.45 W/(m·K)
<i>Grease Properties</i>	<i>Method</i>	<i>Value</i>
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] ^{a)}	ASTM D 1264	0.6%
<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Color	Visual ASTM D 1475	Silver
Odor		Odorless
Density @25 °C [77 °F]		2.35 g/mL
Viscosity		Thixotropic paste
Lubricant		Yes
Bleed Resistant		No
Corrosion Resistant		Yes
VOC (Volatile Organic Compound)		31%

a) Bearing dried at 77 °C [171 °F].

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 greater details on transportation, storage, handling and other security guidelines.

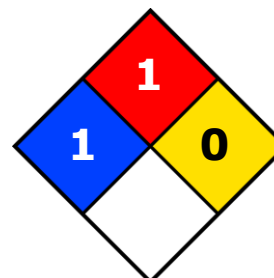
Environmental Impact: The VOC (Volatile Organic Compound) content is 31%. The product is classified as a marine pollutant.

Health and Safety: Wear safety glasses and disposable gloves to avoid exposures.

HMIS® RATING

HEALTH:	1
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

Application Instructions

The conductive paste performance depends on mainly on surface preparation. Improperly prepared contact surfaces can degrade the pastes' stability, conductivity, and lubrication characteristics. While the thickness and coverage are also important, the application method itself can easily be adjusted according to performance and application needs.

Prerequisites

- Wear gloves and protective clothing (see 8463 SDS). This product is messy.
- Clean and dry the surface of the substrate to remove other oils and greases, as well as dust, water, solvents, or any other contaminants.

Recommendation: Use MG 824 Isopropyl Alcohol

Equipment

- Lint free cloth (for cleaning contact and for wiping excess residue)
- Spatula or stick application tools (sized appropriately for your application)
- Isopropyl alcohol or other residue-free organic solvents

NOTE: Avoid oil-based cleaners (like WD-40) that are designed to leave a film on the metal surface. Contaminant oil or grease films may act like barriers reducing the electrical contact between the conductive paste and the metallic substrate.

To apply the paste

1. Wipe the surface with a lint-free cloth.
2. Clean the surface with isopropyl alcohol or other non-oil based cleaner.
3. Once dry, dispense grease onto the surface.



ISO 9001 Registered Quality System.
Burlington, Ontario, Canada QMI File # 004008

Silver Conductive Grease 8463 Technical Data Sheet

8463

ATTENTION!

DO NOT apply or smooth grease with bare finger. Carbon black is hard to clean and may transfer to other surfaces by touch. Further, you may introduce contaminants that degrade the overall performance of the grease.

Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Volume</i>		<i>Net Weight</i>	
8463-7G	Syringe	3.0 mL	0.10 fl oz	7.0 g	0.24 oz
<i>Contact MG Chemicals if custom packaging or sizes are required</i>					

Supporting Products

- *Isopropyl Alcohol*: Cat. No.824

Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

Phone: +(1) 800-340-0772 (Canada, Mexico & USA)
+(1) 905-331-1396 (International)
Fax: +(1) 905-331-2862 or +(1) 800-340-0773

Mailing address: **Manufacturing & Support**
1210 Corporate Drive
Burlington, Ontario, Canada
L7L 5R6

Head Office
9347-193rd Street
Surrey, British Columbia, Canada
V4N 4E7

Warranty

M.G. Chemicals Ltd. warrants this product for 12 months from the date of purchase by the end user. *M.G. Chemicals Ltd.* makes no claims as to shelf life of this product for the warranty. The liability of *M.G. Chemicals Ltd.* whether based on its warranty, contracts, or otherwise shall in no case include incidental or consequential damage.

Disclaimer

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. *M.G. Chemicals Ltd.* does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.