

Description

The 8462 *Translucent Silicone Grease* is a water repelling (hydrophobic), non-melting, and lubricating dielectric grease that provides superior corrosion and arcing resistance for connectors. It is widely applicable because it is safe for most metals, rubbers, plastics, and elastomers. As well, it is usable in many environments due to its high resistance and stability with respect to extreme cold, heat, humidity, and other extreme exposure conditions like high voltages. Voltage arcing can be prevented due to its excellent dielectric properties. Further, because it repels water, it provides excellent oxidation resistance for contacts and relays.

Benefits and Features

- **Stable over wide temperature range and conditions**—Non-melting
- **Excellent electrical insulator**—High dielectric strength
- **Usable for incidental food contact** (Conforms to 21 CFR section 178.3570)
- **Odorless and non-toxic**
- **Corrosion inhibitor**
- **Suitable for Use in Food Facilities as a Non-Food Chemical**—Canadian and NFS recognition letters available on request

ENVIRONMENT

RoHS Compliant
Zero-VOC

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 250 °C [-58 to 482 °F]
Storage Temperature Limits ^{b)}	0 to 25 °C [32 to 77 °F]

b) Cold storage avoids material separation and settling. If storing at 25 °C, mix thoroughly to disperse filler before use.

Principal Components

Name	CAS Number
Dimethylpolysioxane	63148-62-9
Amorphous silica	7631-86-9

Properties

<i>Electrical Properties</i>	<i>Method</i>	<i>Value</i>
Volume Resistivity (ρ_v) Volume Conductivity (σ_v) Dielectric Strength @0.01" Arc Resistance	ASTM D 257 " ASTM D 149	$1 \times 10^{13} \Omega \cdot \text{cm}$ $1 \times 10^{-13} \text{ S/cm}$ 500 V/mil [19.7 kV/mm] 120 s
<i>Thermal Properties</i>	<i>Method</i>	<i>Value</i>
Thermal Conductivity		0.16 W/(m·K)
<i>Grease Properties</i>	<i>Method</i>	<i>Value</i>
Evaporation Loss, 22 h @165 °C [329 °F] Oil Separation, 30 h @165 °C [329 °F] Dropping Point Water Washout @38 °C [100 °F] ^{a)} Worked Penetration Emcor Rust Test, distilled water	ASTM D 2595 ASTM D 6184 ASTM D 2265 ASTM D 1264 IP 220	1.4% 0.4% >304 °C [>579 °F] 3.2% 320 #4 ^{b)}

a) Bearing dried at 77 °C [171 °F]

b) Corroded areas covering >5% and <10% of the running track surface

<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Color Odor Density @25 °C [77 °F] Viscosity Lubricant Bleed Resistant Corrosion Resistant Base Material Filler	Visual ASTM D 1475 Brookfield	Translucent None 0.98 g/mL Thixotropic paste Yes No Yes Silicone Oil Silica

Compatibility

Chemical—It is compatible with a wide variety of metal, rubber, and plastic substances such as ignition switches, valve seats, O-rings, sealing rings, transformer connectors, and cables systems.

Storage

Store between 0 and 10 °C [32 and 50 °F] in dry area to minimize settling. You may also store this product at higher temperatures but this can cause settling. If settling occurs, mix thoroughly until the product is homogeneous again.

Health, Safety, and Environmental Awareness

Please see the 8462 **Safety Data Sheet** (SDS) for greater detail on transportation, storage, handling and other security guidelines.

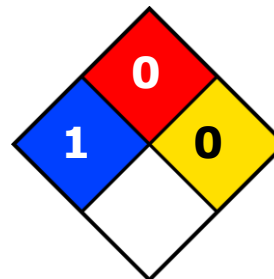
Environmental Impact: The volatile organic content is 0.0% by WHMIS and European standards.

Health and Safety: The 8462 may cause a mild skin or eye irritation.

HMIS® RATING

HEALTH:	1
FLAMMABILITY:	0
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 performance of the 8462 Silicone Grease depends on surface preparation. Improperly prepared contact surfaces can degrade the oxidation protection, dielectric properties, and lubrication characteristics by trapping contaminants between the surface and the grease. The thickness and coverage should be adjusted to meet your needs.

Prerequisites

- Clean and dry the surface of the substrate to remove other oils and greases, as well as dust, water, solvents, or any other contaminants.
- (Optional) Wear gloves to avoid contaminating the surface and to avoid possible skin irritation.

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 (for cleaning)

NOTE: Thoroughly clean oil-based cleaners (like WD-40) that are designed to leave a film on the metal surface.

To apply the paste

1. Wipe the contact with a lint-free cloth.
2. Clean the contacts with isopropyl alcohol or other non-oil based cleaner.
3. Once dry, apply the paste with the application tool to the contact, ensuring adequate coverage and desired thickness.



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

Translucent Silicone Grease 8462 Technical Data Sheet

8462

Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Volume</i>		<i>Net Weight</i>		<i>Packaging Weight</i>	
8462-85ML	Tube	87.9 mL	2.97 fl oz	87 g	3.06 oz	0.12 kg	0.26 lb
8462-1P	Jar	473 mL	16.0 fl oz	468 g	1.03 lb	0.54 kg	1.2 lb
8462-1G	Pail	3.78 L	1.0 gal	3.74 kg	8.25 lb	TBD	TBD

Contact MG Chemicals if custom packaging or sizes are required

TBD = To be determined

Supporting Products

- *Thinner 1*: Cat. No. 4351-1L
- *Isopropyl Alcohol*: Cat. No. 824-1L

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.

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Warranty

M.G. Chemicals Ltd. warranties 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.

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