

## Description

The 8461 *Lithium Grease* is a multi-purpose lubricant that provides long superior lubrication and protection against corrosion. As a lubricant, it reduces metal-to-metal friction and wear while retaining its consistency over a wide temperature range. As a corrosion inhibitor, it prevents water and external contaminants from oxidizing metals.

## Features and Benefits

- **Corrosion inhibitor**
- **Heat resistant**
- **Easy to use and apply: Smooth buttery cream texture**
- **Long lasting**

### ENVIRONMENT

RoHS Compliant  
Zero-VOC

## Usage Parameters

<i>Properties</i>	<i>Value</i>
Shelf Life <sup>a)</sup>	5 y

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

## Temperature Ranges

<i>Properties</i>	<i>Value</i>
Constant Service Temperature	-40 to 180 °C [-40 to 356 °F]
Storage Temperature Limits	25 ±5 °C [77 ±9 °F]

## Principal Components

<b>Name</b>	<b>CAS Number</b>
Lithium Soap	7620-77-1
Mineral Oils	64741-88-4
Zinc Oxide	1314-13-2

## Properties

<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Color	Visual	White
Odor		Odorless
Density @25 °C [77 °F]	ASTM D 1475	0.89 g/mL
Viscosity		Cream, semi-solid
Flash Point	Cleveland Closed Cup	185 °C [365 °F]
Boiling Point		≥371 °C [≥700 °F]
Auto-ignition Temperature		210 °C [410 °F]
Corrosion Resistant		Yes
Solubility		Insoluble
Filler		Lithium Soap
Base Material		Mineral oils
Electrical Class		Insulator

## Compatibility

**Chemical**—It is compatible with a wide variety of metal, rubber, and plastic substances.

## Storage

Store within 25 ±5 °C [77 ±9 °F] in dry area.

## Health, Safety, and Environmental Awareness

Please see the 8461 **Safety Data Sheet** (SDS) for greater details on transportation, storage, handling and other security guidelines.

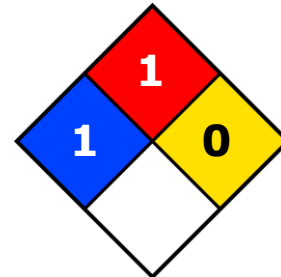
**Environmental Impact:** The VOC (Volatile Organic Compound) content is 0% by WHMIS and European standards.

**Health and Safety:** The 8461 may cause a mild skin or eye irritation. Wear safety glasses and disposable gloves to avoid exposures.

### HMIS® RATING

<b>HEALTH:</b>	<b>1</b>
<b>FLAMMABILITY:</b>	<b>1</b>
<b>PHYSICAL HAZARD:</b>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	

### 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 8461 Lithium 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

- (Optional) Wear gloves to avoid contaminating the surface and to avoid possible skin irritation.
- (see 8461 SDS).
- Clean and dry the surface of the substrate to remove other oils, greases, dust, water, solvents, or any other contaminants.

*Recommendations:* Use MG 824 Isopropyl Alcohol or MG 401B Nu-trol Control Cleaner

### 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



# Lithium Grease Hydrophobic, Corrosion Inhibiting Lubricant 8461 Technical Data Sheet

ISO 9001:2008 Registered Quality System. Burlington, Ontario, CANADA SAI Global File: 004008

8461

## To apply the grease

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.

## Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Volume</i>		<i>Net Weight</i>		<i>Packaging Weight</i>	
<b>8461-85ML</b>	Tube	85 mL	2.87 fl oz	75.6 g	2.66 oz	0.9 kg	2.0 lb
<b>8461-1P</b>	Tub	454 mL	15 fl oz	409 g	13 oz	0.9 kg	2.0 lb

*Contact MG Chemicals if custom packaging or sizes are required*

## 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](http://www.mgchemicals.com).

Email: [support@mgchemicals.com](mailto:support@mgchemicals.com)

Phone: +(1) 800-340-0772 (Canada, Mexico & USA)

+ (1) 905-331-1396 (International)

+ (44) 1663 362888 (UK & Europe)

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.