

## Lithium Grease

### Description

8461 is a general-purpose lithium grease with a smooth, buttery texture. It is a corrosion-resistant lubricant for metal-to-metal, metal-to-plastic, and plastic-to-plastic applications.

8461 is useful for lubricating 3D printer mechanisms, gears, spindles, hinges, latches, tracks, pulleys, cables, machinery, tools, and equipment.

### Features and Benefits

- *Reduces wear and friction*
- *Repels water and prevents corrosion*
- *Resists washout*
- *Broad service temperature range of -40 to 180 °C (-40 to 356 °F)*
- *Does not melt, run or freeze*
- *Non-toxic*
- *Silicone-free*
- *Plastic safe*

### Usage Parameters

Properties	Value
Shelf life	5 y

### Temperature Ranges

Properties	Value
Constant service temperature	-40 to 180 °C [-40 to 356 °F]
Storage temperature limits	25 ±5 °C [77 ±9 °F]

## Properties

Physical Properties	Method	Value
Color	Visual	Off white
Odor	—	Odorless
Density @25 °C [77 °F]	ASTM D 1475	0.89 g/mL
Viscosity	—	Semi-solid
Flash point	ASTM D 92	185 °C [365 °F]
Boiling point	—	371 °C [700 °F]
Melting point	—	185 °C [365 °F]
Auto-ignition temperature	—	254 °C [490 °F]
Solubility	—	Insoluble
Grease Properties	Method	Value
NLGI consistency grade	—	1
Cone penetration @25 °C [77 °F] <sup>a)</sup>	ASTM D 217	310-340
Dropping point	ASTM D 2265	177 °C [350 °F]
Base oil viscosity @40 °C [104 °F]	ASTM D 445	100-125 cst
Viscosity index	ASTM D 2270	95
Thickener type	ASTM D 128	Lithium 12 Hydroxy
Thickener content	ASTM D 128	4-7%
Electrical class	—	Insulator
Corrosion resistant	—	Yes

a) Worked 60 strokes.

## 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 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 an adequate amount of grease to the application area.

## Packaging and Supporting Products

Cat. No.	Packaging	Net Volume	Net Weight	Packaged Weight
8461-85ML	Tube	85 mL [2.87 fl oz]	75.6 g 2.66 oz	0.08 kg [0.18 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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