

WHITE LITHIUM GREASE

8461

Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: White Lithium Grease**SDS Code:** 8461**Related Part #** 8461-85ML, 8461-1P

Recommended Use and Restriction on Use

Use: Multi-purpose lubricant**Uses Advised Against:** Not applicable

Details of Manufacturer or Importer

ManufacturerMG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADAMG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA**☎** +1-800-340-0772**FAX** +1-800-340-0773**E-MAIL** support@mgchemicals.com**WEB** www.mgchemicals.com**☎** +1-905-331-1396**FAX** +1-905-331-2682**E-MAIL** info@mgchemicals.com**E-MAIL** (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
USA or CANADA: Call CHEMTREC ☎: **+1-800-424-9300****For emergencies involving dangerous goods;** Collect 24/7
CANADA: Call CANUTEC ☎: **+1-613-996-6666** or ***666** on cellular phones

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Section 2: Hazards Identification

Classification of Hazardous Chemical

GHS Categories

Criteria	Category	Signal Word	Pictograms
Hazardous to Aquatic Environment Acute	3	None	None

Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity). Severity categories rankings do not allow comparisons between classes.

Label Elements

Signal Word	<i>No signal word</i>
Pictograms	Hazard Statements
<i>No pictogram</i>	H412: Harmful to aquatic life with long lasting effects
Prevention	Precautionary Statements
P273	Avoid release to the environment.
Response	Precautionary Statements
<i>Not applicable</i>	<i>Not applicable</i>
Storage	Precautionary Statements
<i>Not applicable</i>	<i>Not applicable</i>
Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/international regulations.

Other Hazards

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
Not applicable	Not applicable	Not applicable	Not applicable

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Section 3: Hazardous Ingredients

CAS #	Chemical Name	%(weight)
64742-53-6	distillates (petroleum), hydrotreated light naphthenic ^{a)}	30-70%
64742-52-5	distillates (petroleum), hydrotreated heavy naphthenic ^{a)}	20-50%
7620-77-1	lithium 12-hydroxystearate	5-8%
13463-67-7	titanium dioxide	2-3%
1314-13-2	zinc oxide	1-2%

a) Highly refined mineral oils

Section 4: First-Aid Measures

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
IF IN EYES	P305 + P351 + P338, P337 + P313
Immediate Symptoms	<i>redness, mild irritation</i>
Response	Rinse cautiously with water for 15 minutes or more. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN	P302 + P352, P332 + P313
Immediate Symptoms	<i>redness, mild irritation</i>
Response	Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
IF INHALED	P304 + P340, P312
Immediate Symptoms	<i>No known symptoms</i>
Delayed Symptoms	<i>metal fume fever</i>
Response	Remove person to fresh air and keep comfortable for breathing. If exposed to metal fumes: Get medical advice/attention.
IF SWALLOWED	P301 + P330, P331
Immediate Symptoms	<i>nausea, abdominal pain, diarrhea</i>
Response	Rinse mouth. Do NOT induce vomiting.

WHITE LITHIUM GREASE**8461****Section 5: Fire-Fighting Measures**

Response	In case of fire: Use dry chemical, carbon dioxide, water fog, or chemical foam to extinguish.
Specific Hazards	<p>In a fire, this product can release zinc oxide fumes. Zinc oxide fumes exposure may lead to a metal fume fever. The metal fume fever symptoms may occur 4 to 12 hours after initial exposure.</p> <p>Water may cause frothing.</p>
Combustion Products	Combustion produces carbon oxides (CO, CO ₂) and zinc oxide fumes.
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

Section 6: Accidental Release Measures

Personal Protection	See personal protection equipment in Section 8.
Precautions for Response	Remove or keep away all sources of ignition or extreme heat. Avoid breathing fumes. Prevent spill from entering drains.
Environmental Precautions	Avoid release to the environment.
Containment Methods	Not applicable
Cleaning Methods	Collect liquid in a sealable, solvent-resistant container. Use water to remove the last traces of residue.
Disposal Methods	Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention	<p>Keep out of reach of children.</p> <p>Keep away from open flames/hot surfaces.</p> <p>Avoid breathing fumes.</p>
Handling	<p>Wear protective gloves/eye protection.</p> <p>Wash hands thoroughly after handling.</p>
Storage	Not applicable

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Section 8: Exposure Controls/Personal Protection
Substances with Occupational Exposure Limit Values

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
distillates (petroleum), hydrotreated light naphthenic	ACGIH	5 mg/m ³	Not established
	U.S.A. OSHA PEL	5 mg/m ³	Not established
	Canada AB	5 mg/m ³	Not established
	Canada BC	5 mg/m ³	Not established
	Canada ON	5 mg/m ³	Not established
	Canada QC	5 mg/m ³	Not established
distillates (petroleum), hydrotreated heavy naphthenic	ACGIH	5 mg/m ³	Not established
	U.S.A. OSHA PEL	5 mg/m ³	Not established
	Canada AB	5 mg/m ³	Not established
	Canada BC	5 mg/m ³	Not established
	Canada ON	5 mg/m ³	Not established
	Canada QC	5 mg/m ³	Not established
titanium dioxide	ACGIH	10 mg/m ³	Not established
	U.S.A. OSHA PEL	15 mg/m ³	Not established
	Canada AB	10 mg/m ³	Not established
	Canada BC	10 mg/m ³	Not established
	Canada ON	10 mg/m ³	Not established
	Canada QC	10 mg/m ³	Not established
zinc oxide (dust/mist)	ACGIH	2 mg/m ³	Not established
	U.S.A. OSHA PEL	2 mg/m ³	10 mg/m ³
	Canada AB	2 mg/m ³	10 mg/m ³
	Canada BC	2 mg/m ³	10 mg/m ³
	Canada ON	2 mg/m ³	10 mg/m ³
	Canada QC	2 mg/m ³	10 mg/m ³
fumes			

Note: The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database² and from suppliers' SDS were also consulted. Short term exposure limits (STEL) are usually for 15 min and long term permissible exposure limits (PEL) for 8 h.

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WHITE LITHIUM GREASE**8461****Engineering Controls****Ventilation**

Keep airborne concentrations below the occupational exposure limits (OEL).

Since the titanium dioxide dust is bound in the grease matrix, it is not available as a respiration hazard under normal conditions or foreseeable emergency conditions.

Personal Protective Equipment**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Use safety glasses with lateral protection (side shields).

Skin Protection

For likely contacts, use of protective butyl rubber, nitrile, neoprene gloves or other chemically resistant gloves.

For incidental contacts, use disposable nitrile or neoprene gloves, or other chemically resistant gloves.

Respiratory Protection

For over-exposures up to 10 x OEL of mist/vapors/spray, wear respirator such as a half-mask respirator with organic vapor cartridges.

Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.

RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

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Section 9: Physical and Chemical Properties

Physical State	Liquid, grease	Lower Flammability Limit	Not available
Appearance	White	Upper Flammability Limit	Not available
Odor	None	Vapor Pressure @20 °C	Not available
Odor Threshold	Not available	Vapor Density	Not available
pH	Not available	Specific Gravity @25 °C	0.89
Freezing/Melting Point	Not available	Solubility in Water	Immiscible
Boiling Point	≥371 °C [≥700 °F]	Partition Coefficient	Not available
Flash Point ^{a)}	185 °C [365 °F]	Auto-ignition Temperature	210 °C [410 °F]
Evaporation Rate	Not available	Decomposition Temperature	Not available
Flammability (solid, gas)	Not available	Viscosity @40 °C	>20.5 mm ² /s

a) Cleaveland closed cup value

WHITE LITHIUM GREASE**8461****Section 10: Stability and Reactivity**

Reactivity	When the product is exposed to very high heat such as welding or when mechanically aerosolized, this may cause harmful zinc oxide fumes. Inhalation of fumes may cause metal fever and irritate the respiratory tract. The flu-like symptoms of metal fume fever may be delayed, occurring 4–12 hours after exposure.
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Avoid open flames, very high heat (such as soldering and welding temperatures), and incompatible substances.
Incompatibilities	Strong oxidizing agents
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

Section 11: Toxicological Information**Routes of Exposure**

Eye contact, Inhalation, Skin contact, and Ingestion

Symptoms Summary

Eyes	May cause redness and mild eye irritation.
Skin	May cause redness and mild skin irritation.
Inhalation	No known harmful effects expected under normal use. Under extreme heat, inhalation of fumes may lead to metal fume fever.
Ingestion	May cause nausea, abdominal pain, and diarrhea.
Chronic	Not available

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Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
distillates (petroleum), hydrotreated light naphthenic	>5 000 mg/kg Rat	>5 000 mg/kg Rat	2 180 mg/L Rabbit
distillates (petroleum), hydrotreated heavy naphthenic	>5 000 mg/kg Rat	>5 000 mg/kg Rat	>5.53 mg/L Rat (mist)
lithium 12-hydroxystearate	>5 000 mg/kg Rat	>5 000 mg/kg Rat	Not available
titanium dioxide	60 g/kg Rat	Not available	5 700 mg/m ³ Rat (dust)
zinc oxide	7 950 mg/kg Rat	>2 000 mg/kg Rat	2 500 mg/m ³ Mouse

Note: Toxicity data from the RTECS² and ECHA databases were consulted. The data from supplier (M)SDS were also consulted.

Other Toxicological Effects

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Sensitization
(allergic reactions)

Based on available data, the classification criteria are not met.

Carcinogenicity
(risk of cancer)

The titanium dioxide [13463-67-7] is possibly carcinogenic by airborne routes of exposures. Because the titanium is bound in grease mixture, it is not available as an airborne hazard under normal use.

Titanium Dioxide [13463-67-7]

IARC Group 2B: Possibly carcinogenic to humans

ACGIH A4: Not classified as a human carcinogen

CA Prop 65: Listed as a carcinogen (airborne, as unbound particles of respirable size)

NTP: Not listed

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Mutagenicity (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
Reproductive Toxicity (risk to sex functions)	Based on available data, the classification criteria are not met.
Teratogenicity (risk of fetus malformation)	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the mixture classification criteria are not met. The mixture contains over 80% Cat 1 aspiration hazard components; however, the the grease viscosity at 40 °C is >20.5 mm ² /s.

Section 12: Ecological Information

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<http://echa.europa.eu>), and other reliable sources.

Contains 2% zinc oxide which is an acute and chronic category 1 solid (non-biodegradable, minimal LC50 of 0.042 mg/L) that is harmful to the environment.

Acute Ecotoxicity

See chronic Ecotoxicity.

Chronic Ecotoxicity

Category 3

Harmful to aquatic life with long lasting effects. Avoid release to the environment.

Biodegradability

Not available

Other Effects

Not available

Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

WHITE LITHIUM GREASE**8461****Section 14: Transport Information****Ground**

Refer to TDG (Canadian Transportation of Dangerous Goods regulations) and **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Not Regulated

Air

Refer to ICAO-IATA Dangerous Goods Regulations.

Not Regulated

Sea

Refer to IMDG regulations.

Not Regulated

Section 15: Regulatory Information**Canada****Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

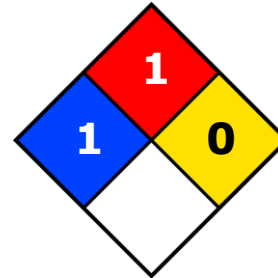
Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

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WHITE LITHIUM GREASE**8461****USA****Other Classifications****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)

CAA (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product does not contain ingredients that subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, Sept 2, 2011 revision, USA).

This product contains titanium dioxide, which is listed as a carcinogenic substances when airborne, as unbound particles of respirable size.

Europe**RoHS** (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

WHITE LITHIUM GREASE**8461****Section 16: Other Information****SDS Prepared by** Michel Hachey**Date of Revision** 11 March 2016**Supersedes** 27 July 2014**Reason for Changes:** New product classified according to HCS 2012 and WHMIS 2015.**Reference**

1) ACGIH 2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
ECHA	European Chemicals Agency
EU	European Union
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
IARC	International Agency for Research on Cancer
NOELR	No observable effect loading ratio
NTP	National Toxicology Program
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

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Technical Queries 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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