

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

WHITE LITHIUM GREASE

8461

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 |

WHITE LITHIUM GREASE
8461
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 |

WHITE LITHIUM GREASE
8461
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.

WHITE LITHIUM GREASE

8461

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 |

Section continued on the next page

WHITE LITHIUM GREASE

8461

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

Section continued on the next page

WHITE LITHIUM GREASE**8461**

| | |
|--|---|
| 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.

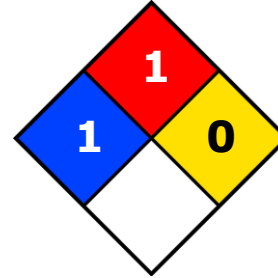
Health Canada

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 |

Section continued on the next page

WHITE LITHIUM GREASE**8461**

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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