

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : LML SPL-460 #2, 3M

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Lubricant
Restrictions on use : No additional information available

1.3. Supplier

Loadmaster Lubricants, LLC
13615 Fenway Blvd. Ct. N
Hugo, MN 55038
T 651-656-2225 - F 651-653-3402

1.4. Emergency telephone number

Emergency number : CHEMTREC (24hrs): 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

Skin sensitisation, Category 1 H317 May cause an allergic skin reaction.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS) :



Signal word (GHS) : Warning

Hazard statements (GHS) : H317 - May cause an allergic skin reaction.

Precautionary statements (GHS) :
P261 - Avoid breathing mist, spray, vapours.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - If on skin: Wash with plenty of water.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS_US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS classification
Lithium carboxylate complex soap	(CAS-No.) trade secret	5 - 10	Acute Tox. 4 (Oral), H302
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	(CAS-No.) 72676-55-2	0.5 - 1.5	Skin Sens. 1B, H317

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Name	Product identifier	%	GHS classification
2,5-bis(octyldithio)-1,3,4-thiadiazole	(CAS-No.) 13539-13-4	0.1 - 0.5	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
5,5'-thiobis(2-mercapto-1,3,4-thiadiazole)	(CAS-No.) 7340-97-8	0.1 - 0.5	Skin Sens. 1B, H317 Aquatic Chronic 2, H411

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. If symptoms persist, contact a doctor or physician.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects after inhalation : Inhalation of vapours may cause respiratory irritation.
- Symptoms/effects after skin contact : May cause an allergic skin reaction. Repeated or prolonged skin contact may cause dermatitis and defatting.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Fire hazard : Burning produces irritating, toxic and noxious fumes.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

6.1.1. For non-emergency personnel

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

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Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing mist, spray, vapours. Avoid contact with skin, eyes and clothing.

Hygiene measures : Do not eat, drink or smoke when using this product. Remove contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container. Keep container closed when not in use.

Incompatible products : Strong oxidizers.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lithium carboxylate complex soap (trade secret)
Not applicable
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione (72676-55-2)
Not applicable
5,5'-thiobis(2-mercapto-1,3,4-thiadiazole) (7340-97-8)
Not applicable
2,5-bis(octyldithio)-1,3,4-thiadiazole (13539-13-4)
Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid creating mist or spray. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Use rubber gloves.

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

None under normal use

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Opaque. Paste.

Colour : Gray

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Odour	: mild petroleum
Odour threshold	: No data available
pH	: 7 – 7.2
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 371 °C
Flash point	: > 204 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: < 1 mm Hg @ 20 °C
Relative vapour density at 20 °C	: No data available
Relative density	: 0.9174
Solubility	: Water: < 5 %
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 460 mm ² /s @ 40 °C
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content : 0 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

hydrocarbons. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Lithium carboxylate complex soap (trade secret)	
LD50 dermal rat	> 2000 mg/kg
ATE (oral)	500 mg/kg bodyweight
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione (72676-55-2)	
LD50 oral rat	6480 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE (oral)	6480 mg/kg bodyweight

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5,5'-thiobis(2-mercapto-1,3,4-thiadiazole) (7340-97-8)

LD50 oral rat	> 2500 mg/kg
LD50 dermal rat	> 2000 mg/kg

2,5-bis(octyldithio)-1,3,4-thiadiazole (13539-13-4)

ATE (dust,mist)	1.5 mg/l/4h
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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

STOT-repeated exposure	: Not classified
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Aspiration hazard	: Not classified
Viscosity, kinematic	: 460 mm ² /s @ 40 °C

Likely routes of exposure	: Inhalation. Skin and eye contact.
Symptoms/effects after inhalation	: Inhalation of vapours may cause respiratory irritation.
Symptoms/effects after skin contact	: May cause an allergic skin reaction. Repeated or prolonged skin contact may cause dermatitis and defatting.

SECTION 12: Ecological information

12.1. Toxicity

Lithium carboxylate complex soap (trade secret)

LC50 fish 1	> 100 mg/l 96 h
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5,5'-thiobis(2-mercapto-1,3,4-thiadiazole) (7340-97-8)

LC50 fish 1	> 100 mg/l 96 h
EC50 crustacea	18 mg/l 48 h
NOEC (acute)	0.56 mg/l Daphnia 48 h

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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5,5'-thiobis(2-mercapto-1,3,4-thiadiazole) (7340-97-8)

Persistence and degradability	Not readily biodegradable.
Biodegradation	41 % 28 d

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

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Ecology - soil	Not established.
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12.5. Other adverse effects

Other information	: Avoid release to the environment.
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SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations	: Do not dispose of waste into sewer.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

ADG

Not regulated.

Transport by sea

Not regulated.

Air transport

Not regulated.

SECTION 15: Regulatory information

National regulations

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All components are listed on the AICS (Australian Inventory of Chemical Substances).
All ingredients are listed on the Canadian Domestic Substances List (DSL) or Non-Domestic Substances List (NDSL).

Lithium carboxylate complex soap (trade secret)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on Taiwan National Chemical Inventory
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione (72676-55-2)

Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on Taiwan National Chemical Inventory
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

5,5'-thiobis(2-mercapto-1,3,4-thiadiazole) (7340-97-8)

Listed on the AICS (Australian Inventory of Chemical Substances)

2,5-bis(octyldithio)-1,3,4-thiadiazole (13539-13-4)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
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Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

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SECTION 16: Other information

Data sources : ACGIH (American Conference of Government Industrial Hygienists). Canadian Centre for Occupational Health and Safety. Accessed at: http://www.ccohs.ca/oshanswers/legisl/whmis_classifi.html. European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th edition. TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>. OSHA 29CFR 1910.1200 Hazard Communication Standard. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Manufacturer Information. Australia Worksafe "Preparation of Safety Data Sheets for Hazardous Chemicals".

Other information : None.

Full text of H-statements:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	TSCA: Toxic Substances Control Act
	STEL: Short Term Exposure Limits
	TWA: Time Weighted Average

SDS Prepared by: The Redstone Group

110 Polaris Pkwy
Suite 200
Westerville, OH USA 43082
P: +1 (614) 923-7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.