

LML SPL-460 #2, 3M Safety Data Sheet

according to Regulation (EU) 2015/830 Date of issue: 2/19/2020 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Product name

: Mixture : LML SPL-460 #2, 3M

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec

Use of the substance/mixture

: Industrial For professional use only : Lubricant

1.2.2. Uses advised against

Restrictions on use

: No additional information available

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

Emergency number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1 Full text of H statements : see section 16 H317

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

	GHS07
Signal word (CLP)	: Warning
Hazardous ingredients	: 5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction.
Precautionary statements (CLP)	: P261 - Avoid breathing mist, spray, vapours.
	P272 - Contaminated work clothing should not be allowed out of the workplace.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
	P362+P364 - Take off contaminated clothing and wash it before reuse.
	P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Unknown hazards to the aquatic environment (CLP)	: Contains 2.26 % of components with unknown hazards to the aquatic environment
0.0. Other hannels	

2.3. Other hazards

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PBT: not yet assessed vPvB: not yet assessed

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lithium carboxylate complex soap	(CAS-No.) 38900-29-7 (EC-No.) 254-184-4	5 - 10	Acute Tox. 4 (Oral), H302
5,5'-dithiodi-1,3,4-thiadiazole-2(3H)-thione	(CAS-No.) 72676-55-2 (EC-No.) 276-763-0	0.5 - 1.5	Skin Sens. 1B, H317
calcium carbonate	(CAS-No.) 471-34-1 (EC-No.) 207-439-9	0.5 - 1.5	Not classified
2,5-bis(octyldithio)-1,3,4-thiadiazole	(CAS-No.) 13539-13-4 (EC-No.) 236-912-2	0.1 - 0.5	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
5,5'-thiobis(2-mercapto-1,3,4-thiadiazole)	(CAS-No.) 7340-97-8 (EC-No.) 452-150-5	0.1 - 0.5	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Magnesium carbonate	(CAS-No.) 546-93-0 (EC-No.) 208-915-9	<0.1	Not classified

Full text of 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). : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position First-aid measures after inhalation 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 sysmptoms persist, contact a doctor or physician. 4.2. Most important symptoms and effects, both 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. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	

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

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5.2. Special hazards arising from the substance or mixture	
Fire hazard	: Burning produces irritating, toxic and noxious fumes.
5.3. Advice for firefighters	
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. EN469.

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.		
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 sto	orage
7.1. Precautions for safe handlin	ng
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.

7.3. Specific end use(s)

Lubricant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Magnesium carbonate (546-93-0)

Belgium - Occupational Exposure Limits

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Magnesium carbonate (546-93-0)			
Limit value (mg/m³)	10 mg/m ³		
France - Occupational Exposure Limits			
Local name	Magnésium (Carbonate de) (Magnésite)		
VME (mg/m³)	10 mg/m ³		
Note (FR)	Valeurs recommandées/admises		
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)		
Ireland - Occupational Exposure Limits			
OEL (8 hours ref) (mg/m³)	10 mg/m ³ total inhalable dust 4 mg/m ³ respirable dust		
Lithuania - Occupational Exposure Limits			
IPRV (mg/m ³)	10 mg/m ³		
Remark (LT)	F		
United Kingdom - Occupational Exposure	e Limits		
WEL TWA (mg/m³)	10 mg/m ³ inhalable aerosol 4 mg/m ³ respirable aerosol		
Switzerland - Occupational Exposure Lim	nits		
VME (mg/m³)	3 mg/m ³		
Remark	(respirable aerosol)		
calcium carbonate (471-34-1)			
France - Occupational Exposure Limits			
Local name	Calcium (carbonate de) (Calcite) (Marbre)		
VME (mg/m³)	10 mg/m ³		
Note (FR)	Valeurs recommandées/admises		
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)		
Hungary - Occupational Exposure Limits			
AK-érték	10 mg/m ³		
Megjegyzések (HU)	inhalable aerosol		
Latvia - Occupational Exposure Limits			

Latvia - Occupational Exposure Limits		
Local name	Kalcija karbonāts	
OEL TWA (mg/m³)	6 mg/m³	
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)	

Poland - Occupational Exposure Limits		
Local name	Węglan wapnia	
NDS (mg/m³)	10 mg/m³ frakcja wdychalna	
Remark (PL)	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.	
Regulatory reference	Dz. U. 2018 poz. 1286	
United Kingdom - Occupational Exposure Limits		
WEL TWA (mg/m³)	10 mg/m ³ inhalable aerosol 4 mg/m ³ respirable aerosol	

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calcium carbonate (471-34-1)		
Switzerland - Occupational Exposure Limits		
VME (mg/m³)	3 mg/m³	
Remark	(respirable aerosol)	

8.2. Exposure 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.

Personal protective equipment:

Avoid all unnecessary exposure.

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

		en proportion
Physical state	:	Liquid
Appearance	•	Opaque. Paste.
Colour	:	Gray.
Odour	•	mild. petroleum.
Odour threshold	:	No data available
рН	:	7 – 7.2
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 371 °C
Flash point	:	> 204 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	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
Viscosity, kinematic	:	460 mm²/s @ 40 °C
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available
9.2. Other information		
VOC content	:	0 g/l

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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 informatio	n
11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

Lithium carboxylate complex soap (38900-29-7)	
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

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

Magnesium carbonate (546-93-0)	
LD50 oral rat	> 2000 mg/kg

calcium carbonate (471-34-1)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 3 mg/l/4h

Skin corrosion/irritation

: Not classified (Based on available data, the classification criteria are not met)

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Respiratory or skin sensitisation	 Not classified (Based on available data, the classification criteria are not met) May cause an allergic skin reaction. Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	Not classified (Based on available data, the classification criteria are not met)
LML SPL-460 #2, 3M	
Viscosity, kinematic	460 mm²/s @ 40 °C

SECTION 12: Ecological information	
12.1. Toxicity	
Unknown hazards to the aquatic environment (CLP) Hazardous to the aquatic environment, short-term (acute)	: Contains 2.26 % of components with unknown hazards to the aquatic environment : Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

Lithium carboxylate complex soap (38900-29-7)	
LC50 fish 1	> 100 mg/l 96 h

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
EC50 72h algae (1)	14 mg/l 72 h
NOEC (acute)	0.56 mg/l Daphnia 48 h

Magnesium carbonate (546-93-0)	
LC50 fish 1	2120 – 2802 mg/l
LC50 other aquatic organisms 1	> 140 mg/l

calcium carbonate (471-34-1)	
LC50 fish 1	> 100 % v/v, 96 h
EC50 crustacea	> 100 % v/v, 48 h

12.2. Persistence and degradability

LML SPL-460 #2, 3M	
Persistence and degradability	Not established.

5,5'-thiobis(2-mercapto-1,3,4-thiadiazole) (7340-97-8)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	41 % 28 d

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12.3. Bioaccumulative potential

•		
LML SPL-460 #2, 3M		
baccumulative potential Not established.		
12.4. Mobility in soil		
LML SPL-460 #2, 3M		
Ecology - soil	Not established.	
12.5. Results of PBT and vPvB assessment		
LML SPL-460 #2, 3M		
PBT: not yet assessed		
vPvB: not yet assessed		
12.6. Other adverse effects		
Additional information :	Avoid release to the environment.	
SECTION 13: Disposal considerations		

13.1. Waste treatment 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.
European List of Waste (LoW) code	: For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.
HP Code	 HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

 Not regulated. Not regulated. Not regulated. Not regulated. Not regulated.
 Not regulated. Not regulated. Not regulated. Not regulated. Not regulated. Not regulated.
 Not regulated. Not regulated. Not regulated. Not regulated.
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RID

Transport hazard class(es) (RID)

14.4. Packing group

Packing group (ADR) Packing group (IMDG) Packing group (IATA) Packing group (ADN) Packing group (RID)

14.5. Environmental hazards

Dangerous for the environment Marine pollutant Other information NoNoNo supplementary information available

: Not regulated.

14.6. Special precautions for user

Overland transport

Not regulated. Transport by sea Not regulated. Air transport Not regulated. Inland waterway transport Not regulated. Rail transport Not regulated.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on Entry title or description	
3(b)	LML SPL-460 #2, 3M ; 5,5'-thiobis(2- mercapto-1,3,4-thiadiazole) ; 2,5- bis(octyldithio)-1,3,4-thiadiazole	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	5,5'-thiobis(2-mercapto-1,3,4-thiadiazole)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content

: 0 g/l

15.1.2. National regulations

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).

Germany

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Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG) Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)
Water hazard class (WGK)	: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting	: None of the components are listed
giftige stoffen – Borstvoeding	
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed
5 5	
Denmark	
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product
15.2. Chemical safety assessment	

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acro	nyms:
	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
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.

Classification according to Regulation (EC) No. 1272/2008 [CLP]:		
Skin Sens. 1	H317	
Full text of U. and FULL statements.		

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

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Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
Skin Sens. 1	Skin sensitisation, Category 1		
Skin Sens. 1B	Skin sensitisation, category 1B		
H302	Harmful if swallowed.		
H315	Causes skin irritation.	Causes skin irritation.	
H317	May cause an allergic skin reaction.		
H319	Causes serious eye irritation.	Causes serious eye irritation.	
H332	Harmful if inhaled.		
H411	Toxic to aquatic life with long lasting effects.	Toxic to aquatic life with long lasting effects.	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:				
Skin Sens. 1	H317	Calculation method		

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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.