Lithium Complex Red Grease

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 04/23/2019 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Lithium Complex Red Grease

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Lubricant

Restrictions on use : No additional information available

1.3. Supplier : **IDEAS ADDITIVES LLC**
625 SOUTH MAIN STREET

LOMBARD, ILLINOIS 60148

1.4. Emergency telephone number

Emergency number :ChemTel (24hrs) Contract# MIS9447697
For Unites States, Canada, Puerto Rico, and the U.S. Virgin Islands: 1-800-255-3924
For International: +1-813-248-0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Sens. 1 H317 May cause an allergic skin reaction.

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

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

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

Precautionary statements (GHS US) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
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

Comments : There is no exposure to respirable particles when this product is used as intended.

Name	Product identifier	%	GHS-US classification
Lithium carboxylate complex soap	(CAS-No.) trade secret	10 - 20	Acute Tox. 4 (Oral), H302

Name	Product identifier	%	GHS-US classification
Sulfurized diisobutylene	(CAS-No.) trade secret	0.5 - 1.5	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Thiadiazole 1	(CAS-No.) trade secret	0.1 - 0.5	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Thiadiazole 2	(CAS-No.) trade secret	0.1 - 0.5	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Thiadiazole 3	(CAS-No.) trade secret	0.01 - 0.2	Skin Sens. 1B, H317

***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.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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 (acute and delayed)

Symptoms/effects after skin contact : May cause an allergic skin reaction.

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.
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.
Other information	:	Spilled material may present a slipping hazard.

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.
Hygiene measures	:	Do not eat, drink or smoke when using this product.

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.
Storage area	:	Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Lithium carboxylate complex soap (trade secret)
Not applicable
Thiadiazole 1 (trade secret)
Not applicable
Thiadiazole 3 (trade secret)
Not applicable
Sulfurized diisobutylene (trade secret)
Not applicable
Thiadiazole 2 (trade secret)
Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid splashing. Ensure good ventilation of the work station.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Use rubber gloves.

Eye protection:

In case of splashing or aerosol production: protective goggles.

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	:	Grease.
Colour	:	red
Odour	:	mild petroleum
Odour threshold	:	No data available
pH	:	No data available
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	:	0.92 @ 20 °C
Solubility	:	Water: < 5 %
Log Pow	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	> 150 mm²/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

No additional information available

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

Lithium carboxylate complex soap (trade secret)	
ATE US (oral)	500 mg/kg bodyweight

Thiadiazole 1 (trade secret)	
LD50 oral rat	> 2500 mg/kg
LD50 dermal rat	> 2000 mg/kg

Thiadiazole 3 (trade secret)	
LD50 oral rat	6480 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	6480 mg/kg bodyweight

Sulfurized diisobutylene (trade secret)	
LD50 oral rat	3641 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ATE US (oral)	3641 mg/kg bodyweight

Thiadiazole 2 (trade secret)	
ATE US (dust,mist)	1.5 mg/l/4h

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

Aspiration hazard : Not classified

Viscosity, kinematic : > 150 mm²/s @ 40 °C

Likely routes of exposure : Inhalation. Skin and eye contact.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

Lithium carboxylate complex soap (trade secret)	
LC50 fish 1	> 100 mg/l 96 h

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

Sulfurized diisobutylene (trade secret)	
EC50 Daphnia 1	0.035 mg/l 48 h

12.2. Persistence and degradability

Lithium Complex Red Grease	
Persistence and degradability	Not established.

Thiadiazole 1 (trade secret)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	41 % 28 d

Sulfurized diisobutylene (trade secret)	
Persistence and degradability	inherently biodegradable.

12.3. Bioaccumulative potential

Lithium Complex Red Grease	
Bioaccumulative potential	Not established.

Sulfurized diisobutylene (trade secret)	
Log Pow	12.56

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Department of Transportation (DOT)

In accordance with DOT

Not regulated.

Transport by sea

Not regulated.

Air transport

Not regulated.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

Lithium carboxylate complex soap (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.

Thiadiazole 1 (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.

Thiadiazole 3 (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.

Sulfurized diisobutylene (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.

Thiadiazole 2 (trade secret)
Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

No additional information available

Thiadiazole 1 (trade secret)
Not listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) Listed on ELINCS (European List of Notified Chemical Substances)

Thiadiazole 3 (trade secret)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Thiadiazole 2 (trade secret)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Thiadiazole 1 (trade secret)
Exempt from the United States Toxic Substances Control Act (TSCA) inventory. Listed on the AICS (Australian Inventory of Chemical Substances)

Thiadiazole 3 (trade secret)
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)

Thiadiazole 2 (trade secret)
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) 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

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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. WHMIS: The Workplace Hazardous Materials Information System: Canada's national hazard communication standard.

Other information : None.

Full text of H-statements:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
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.

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

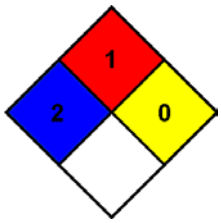
Abbreviations and acronyms:

	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

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



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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.