



LITHIUM-12-OXY-STEARAT

Version 1.0

Revision Date 25.05.2015

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : LITHIUM-12-OXY-STEARAT

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

Use of the Substance/Mixture : Lubricants and lubricant additives

1.3 Details of the supplier of the safety data sheet

Company : Baerlocher Production USA LLC
5890 Highland Ridge Drive
45232 Cincinnati
Telephone : Day 330-602-1528, 330-602-1531 or -1530
Telefax : Night 513-207-1620 or 513-604-2327
E-mail address : Hotline.PS@baerlocher.com
Responsible/issuing person : Product Safety Department

1.4 Emergency telephone number (0 - 24 h)

Tel.: 800-424-9300 USA or 703-527-3887

2. Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Global Harmonized System (GHS)
Not a hazardous substance or mixture according to OSHA
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008
This substance is not classified as dangerous according to Directive 67/548/EEC or 1999/45/EC.
WHMIS hazard class – not controlled.

2.2 Label elements

OSHA 29 CFR § 1910.1200

Signal word: Warning

Hazard Statement: May form combustible dust concentrations in air.

Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008

2.3 Hazards not otherwise classified (HNOC)

Health injuries are not known or expected under normal use.



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3. Composition/information on ingredients

3.1 Substances

- Common names : Lithium 12-Oxystearat, Lithium 12-hydroxystearate
CAS# 7620-77-1
- Chemical nature : Lithium salt of 12-hydroxystearic acid
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4. First aid measures

4.1 Description of first aid measures

- If inhaled : Move to fresh air.
- In case of skin contact : Wash off with plenty of water.
- In case of eye contact : Rinse with plenty of water.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.
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5. Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical
Sand

- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Smoke and fumes, toxic.

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.



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6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Avoid dust formation.
Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Use mechanical handling equipment.
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Take precautionary measures against static discharges.
Keep away from sources of ignition - No smoking.
Avoid formation and buildup of dust.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store at room temperature in the original container.
Keep in a dry place.

8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Components	Basis	Value	Note
Article I.	ACGIH TLV	10 mg/m ³	total dust
General limits for air	ACGIH TLV	3 mg/m ³	Respirable fraction
contaminants	OSHA PEL	15 mg/m ³	total dust
(PNOC)	OSHA PEL	5 mg/m ³	Respirable fraction



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8.2 Exposure controls

Engineering measures

Local exhaust

Personal protective equipment

- Respiratory protection : Half mask with a particle filter P2 (EN 143).
Necessary, in case of dust formation.
- Hand protection : protective gloves acc. to EN 374, e.g. neoprene
- Eye protection : Safety glasses
- Skin and body protection : Long sleeved clothing
- Hygiene measures : When using do not eat or drink.
Do not smoke.
Wash hands before breaks and at the end of workday.
Shower or bathe at the end of working.
Keep working clothes separately.
- Protective measures : Static dissipative shoes are recommended for use in
environments that may not have sufficient ventilation and
engineering controls to prevent incidental releases of airborne
concentrations of the combustible dust to present an
explosion hazard from static electrical discharge from
personnel.

Environmental exposure controls

- General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : White to off-white powder
- Odor : slight fatty odor
- Odor Threshold : no data available
- pH : 7 - 9, 20 °C
- Melting point/range : > 200 °C, Kofler Hot Bar (OECD 102)
- Flash point : >> 100 °C, ASTM D 3828
- Evaporation rate : no data available
- Flammability (solid, gas) : no data available
- Flammability or explosive limits : no data available
- Upper : no data available
- Lower (MEC) : no data available



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Vapor Pressure	:	no data available
Vapor Density	:	no data available
Density	:	1,01 - 1,02 g/cm ³ , OECD 109
Solubility	:	insoluble in water
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	Stable under normal storage and handling temperatures
Viscosity	:	no data available
Molecular formula	:	Mixture derived from natural products
Molecular weight	:	306.4 (approximate)

9.2 Other information

Bulk density : no data available

10. Stability and reactivity

10.1 Reactivity

Stable at normal ambient temperature and pressure.

10.2 Chemical stability

No decomposition if stored normally.

10.3 Possibility of hazardous reactions

Hazardous reactions : Risk of dust explosion.

10.4 Conditions to avoid

Conditions to avoid : Avoid dust formation.
Sources of ignition

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : No decomposition if used as directed.



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11. Toxicological information

11.1 Information on toxicological effects

Product

- Acute oral toxicity : LD50: > 5.000 mg/kg, rat, OECD Test Guideline 401
: Read-across (Analogy)
: LD50: > 2.000 mg/kg, rat, OECD Test Guideline 420, GLP: yes, Based on available data, the classification criteria are not met.
- Acute inhalation toxicity : Based on available data, the classification criteria are not met.
- Acute dermal toxicity : Read-across (Analogy)
: LD50: > 2.000 mg/kg, rat, OECD Test Guideline 402, GLP: yes, Based on available data, the classification criteria are not met.
- Skin corrosion/irritation : Read-across (Analogy)
: EPISKIN Human Skin Model Test, Result: not irritating, OECD Test Guideline 439, 15 min, GLP: yes
: Read-across (Analogy)
: reconstructed human epidermis (RhE), Result: not irritating, OECD Test Guideline 431, 4 h, GLP: yes, Based on available data, the classification criteria are not met.
- Serious eye damage/eye irritation : Read-across (Analogy)
: rabbit, Result: not irritating, OECD Test Guideline 405, GLP: yes, Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation : Skin sensitisation
: Read-across (Analogy)
: LLNA, mouse, Result: not sensitising, OECD Test Guideline 429, GLP: yes, Based on available data, the classification criteria are not met.
: Respiratory sensitisation
: Based on available data, the classification criteria are not met.



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Germ cell mutagenicity

- Genotoxicity in vitro
- : Mutagenicity (Salmonella typhimurium - reverse mutation assay), Bacteria, Result: negative, OECD Test Guideline 471, GLP: yes
 - : Read-across (Analogy)
 - : In vitro gene mutation study in mammalian cells, mouse lymphoma cells, Result: negative, OECD Test Guideline 476, GLP: yes
 - : Read-across (Analogy)
 - : Mutagenicity (in vitro mammalian cytogenetic test), Human lymphocytes, Result: negative, OECD Test Guideline 473, GLP: yes, Based on available data, the classification criteria are not met.

Carcinogenicity

- : Read-across (Analogy)
- : Based on available data, the classification criteria are not met.

STOT - single exposure

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

STOT - repeated exposure

- : Read-across (Analogy)

STOT - repeated exposure

- : rat, Dermal, NOAEL: 1.000 mg/kg, OECD Test Guideline 422, GLP: yes, Based on available data, the classification criteria are not met.

Aspiration toxicity

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

11.2 Other Information

Likely route of exposure

- : Inhalation, Ingestion, Skin contact.

Carcinogenicity

- : Not listed in the National Toxicology Program (NTP) Report on carcinogens, not found to be a potential carcinogen by the International Agency for Research on Cancer (IARC) nor by OSHA.

Further information

- : CMR effects, Carcinogenicity, Mutagenicity, Reproductive toxicity, Hazard assessment, Category 1A, Category 1B, Based on available data, the classification criteria are not met.
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12. Ecological information

12.1 Toxicity

- Toxicity to fish : Read-across (Analogy)
: LL50: > 100 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout), semi-static test, OECD Test Guideline 203, GLP: yes, Value referred to the Water accumulated fraction (WAF).
- Toxicity to daphnia and other aquatic invertebrates : Read-across (Analogy)
: EL50: > 100 mg/l, 48 h, Daphnia magna (Water flea), static test, OECD Test Guideline 202, GLP: yes, Value referred to the Water accumulated fraction (WAF).
- Toxicity to algae : Read-across (Analogy)
: EL50: > 100 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae), static test, OECD Test Guideline 201, GLP: yes, Value referred to the Water accumulated fraction (WAF).
- Toxicity to bacteria : Read-across (Analogy)
: NOEC: 13 mg/l, 28 d, activated sludge, static test, OECD, GLP: yes
- Ecotoxicology Assessment
- Acute aquatic toxicity : Based on available data, the classification criteria are not met.
- Chronic aquatic toxicity : Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

- Biodegradability : Read-across (Analogy)
: aerobic, 97 %, Result: Readily biodegradable., Exposure time: 28 d, activated sludge, OECD Test Guideline 301 B
- : aerobic, 78 %, Result: Readily biodegradable., Exposure time: 28 d, activated sludge, OECD Test Guideline 301 C, GLP: yes

12.3 Bioaccumulative potential

- Bioaccumulation : Read-across (Analogy)
: This substance is not considered to be bioaccumulating.

12.4 Mobility in soil

- Mobility : no data available

12.5 Results of PBT and vPvB assessment

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

12.6 Other adverse effects

- Further information : No information available.



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13. Disposal considerations

13.1 Waste treatment methods

- Product : Consult an expert on the disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Dispose in accordance with local, state and federal regulations.
- Contaminated packaging : Empty containers must be handled with care due to product residue.

14. Transport information

- 14.1 UN number : Not applicable
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

- 14.2 Proper shipping name
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

- 14.3 Transport hazard class
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

- 14.4 Packing group
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

- 14.5 Environmental hazards
DOT : Not dangerous goods
TDG (Canada) : Not dangerous goods
IMDG : Not dangerous goods
IATA : Not dangerous goods

- 14.6 Special precautions for user
See this safety data sheet chapter 6. - 8.

- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Remarks : No transport according to Annex II of MARPOL 73/78 and the IBC Code



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15. Regulatory information

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

Section 313 Supplier Notification (USA)

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

Components	CAS-No.	wt [%]
Not applicable		

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

15.3 Chemical Inventory

Europe	EINECS	:	listed
United States	TSCA	:	listed
Canada	DSL	:	listed
Australia	AICS	:	listed
Japan	ENCS	:	listed
Korea	KECL	:	listed
Philippines	PICCS	:	listed
China	IECSC	:	listed

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

16. Other information

16.1 HMIS Rating (USA)

Health	1
Flammability	1
Reactivity	1
Personal Protection	E

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.