

SAFETY DATA SHEET

Date Accessed: 25/08/2023

Date Revised: 04/11/2022

SECTION 1. IDENTIFICATION

Product Name: Lithium Stearate

CAS #: 4485-12-5

Relevant identified uses of the substance: Scientific research and development

Supplier details:

Stanford Advanced Materials

E-mail: sales@samaterials.com

Tel: (949) 407-8904

Address: 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A.

SECTION 2. HAZARDS IDENTIFICATION

Classification

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

None required

Hazards not otherwise classified (HNOC)

May form combustible dust concentrations in air

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Lithium stearate

CAS-No 4485-12-5

Weight % 95+

SECTION 4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation Remove from exposure, lie down. Move to fresh air.

Ingestion Clean mouth with water. Get medical attention.

Most important symptoms/effects No data available.

Notes to Physician Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. chemical foam.

Unsuitable Extinguishing Media No data available

Flash Point No data available

Method - No data available

Autoignition Temperature No data available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No data available

Sensitivity to Static Discharge No data available

Specific Hazards Arising from the Chemical

Dust can form an explosive mixture in air.

Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO₂)

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health

0

Flammability

1

Instability

0

Physical hazards

N/A

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions See Section 12 for additional ecological information.

Methods for Containment and Clean Up

Sweep up or vacuum up spillage and collect in suitable container for disposal

SECTION 7. HANDLING AND STORAGE

Handling Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist.

Storage Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits

established by the region specific regulatory bodies.

Component ACGIH TLV OSHA PEL NIOSH IDLH

Lithium stearate TWA: 10 mg/m³

Component

Lithium stearate

Quebec Mexico OEL (TWA) Ontario TWAEV

TWA: 10 mg/m³

ACGIH - American Conference of Governmental Industrial Hygienists

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described

by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European

Standard

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Powder Solid

Appearance White

Odor No data available

Odor Threshold No data available

pH No data available

Melting Point/Range 220 °C / 428 °F

Boiling Point/Range No data available

Flash Point No data available

Evaporation Rate No data available

Flammability (solid,gas) No data available

Flammability or explosive limits

Upper No data available

Lower No data available

Vapor Pressure No data available

Vapor Density No data available

Relative Density No data available

Solubility No data available

Partition coefficient; n-octanol/water No data available

Autoignition Temperature No data available

Decomposition Temperature No data available

Viscosity No data available

Molecular Formula C₁₈ H₃₅ Li O₂

Molecular Weight 290.41

SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Acids, Bases, Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO₂)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Component LD50 Oral LD50 Dermal LC50 Inhalation

Lithium stearate 15 g/kg (Rat) Not listed Not listed

Toxicologically Synergistic

Products

No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No data available

Sensitization No data available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component CAS-No IARC NTP ACGIH OSHA Mexico

Lithium stearate 4485-12-5 Not listed Not listed Not listed Not listed Not listed

Mutagenic Effects No data available

Reproductive Effects No data available.

Developmental Effects No data available.

Teratogenicity No data available.

STOT - single exposure None known

STOT - repeated exposure None known

Aspiration hazard No data available

Symptoms / effects, both acute and

delayed

No data available

Endocrine Disruptor Information No data available

Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No data available

Bioaccumulation/ Accumulation No data available.

Mobility No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is

classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

Page 4 / 6

IATA Not regulated

IMDG/IMO Not regulated

SECTION 15. REGULATORY INFORMATION

International Inventories

Component TSCA DSL NDSL EINECS ELINCS NLP PICCS ENCS AICS IECSC KECL

Lithium stearate X X - 224-772-5 - X X X X X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) N/A

SARA 313 N/A

SARA 311/312 Hazardous Categorization

Acute Health Hazard No

Chronic Health Hazard No

Fire Hazard Yes

Sudden Release of Pressure Hazard No

Reactive Hazard No

Clean Water Act N/A

Clean Air Act N/A

OSHA Occupational Safety and Health Administration N/A

CERCLA

N/A

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know N/A

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No data available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and

the MSDS contains all the information required by the CPR

WHMIS Hazard Class B4 Flammable solid

SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.