1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Lithium bis(trimethylsilyl)amide
Product Number: 324620
Brand: Aldrich
Supplier: Sigma-Aldrich
Telephone: +1 800-325-5832
Fax: +1 314-776-6555
Preparation Information: Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8585

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Flammable solid, Target Organ Effect, Corrosive
Target Organs
Nerves.

GHS Classification
Flammable solids (Category 1)
Skin corrosion (Category 1B)
Serious eye damage (Category 1)

GHS Label elements, including precautionary statements
Signal word: Danger
Hazard statements:
H228 Flammable solid.
H314 Causes severe skin burns and eye damage.

Precautionary statement(s):
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P251 + P338 If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Other hazards
React violently with water.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Hexamethyldisilazane
Formula: C6H12N2Si2
Molecular Weight: 167.35 g/mol

Component | Concentration
--- | ---
Lithium bis(trimethylsilyl)amide
CAS No. 4038-32-1
EC-No. 223-725-6

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
In case of skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
Inhalation
Inhalation may be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin
May be harmful if absorbed through skin. Causes skin burns.

5. FIREFIGHTING MEASURES

Conditions of flammability
Flammable in the presence of a source of ignition, through friction or retained heat. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media
Dry powder.

Special protective equipment for firefighters
Wear self-contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Lithium oxides, silicon oxides.
Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE
Precautions for safe handling
Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage.
Air sensitive. Handle and store under inert gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Contains no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance
Form: Crystalline powder
Chunk
Colour: white, light yellow
pH: no data available

Melting point/freezing point: no data available
Boiling point: no data available
Flash point: no data available
Flammability (solid, gas): The substance or mixture is a flammable solid with the category 1.
Ignition temperature: no data available
Auto-Ignition temperature: no data available
Lower explosion limit: no data available
Upper explosion limit: no data available
Vapour pressure: no data available
Density: 0.86 g/cm³ at 25 °C (77 °F)
Water solubility: no data available
Partition coefficient: n-octanol/water: no data available
Relative vapor density: no data available
Odour: no data available
Odour Threshold: no data available
Evaporation rate: no data available

10. STABILITY AND REACTIVITY
Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
Reacts violently with water.

Conditions to avoid
Heat, flames and sparks. Extremes of temperature and direct sunlight. Exposure to moisture.

Matters to avoid
Strong oxidizing agents, acids. Alcohols, Keep away from water.

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Lithium oxides, silicon oxides
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION
Acute toxicity
Oral LD50: no data available
Inhalation LC50: no data available
Dermal LD50: no data available

Other information on acute toxicity: no data available

Atdrach - 524200
Delivery 086141698 000040 Purchase Order HSF2013RES
Page 3 of 7

Atdrach - 524200
Delivery 086141698 000040 Purchase Order HSF2013RES
Page 4 of 7
12. ECOLOGICAL INFORMATION

Toxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential
do not apply

Mobility in soil
do not apply

PBT and vPvB assessment
no data available

Other adverse effects
no data available

13. DISPOSAL CONSIDERATIONS

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN number: 2925 Class: 4.1 (8) Packing group II
Proper shipping name: Flammable solids, corrosive, organic, N.O.S. (Lithium bis(trimethylsilyl)amide)
Marine Pollutant: No
Poison Inflammation Hazard: No

IMDG
UN number: 2925 Class: 4.1 (8) Packing group II
EMR-No: P-A, S-G
Proper shipping name: FLAMMABLE SOLID, CORROSIVE, ORGANIC, N.O.S. (Lithium bis(trimethylsilyl)amide)
Marine Pollutant: No

IATA
UN number: 2925 Class: 4.1 (8) Packing group II
Proper shipping name: Flammable solid, corrosive, organic, N.O.S. (Lithium bis(trimethylsilyl)amide)

15. REGULATORY INFORMATION

OSHA Hazards
Flammable solid, Target Organ Effect, Corrosive

SARA 302 Components
BAPA 302: No chemicals in this material are subject to the reporting requirements of BAPA Title III, Section 302.

SARA 313 Components
BAPA 313: This material does not contain any chemicals with known SAR numbers that exceed the threshold (0.1 Minimum) reporting levels established by BAPA Title III, Section 313.

SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components
No components subject to the Massachusetts Right To Know Act.

Pennsylvania Right To Know Components
CAS-No. Revision Date

Additional Information
RTECS: Not available
16. OTHER INFORMATION

Further Information
Copyright 2013 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.
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. Sigma Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or
from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for
additional terms and conditions of sale.