

# **SAFETY DATA SHEET**

Creation Date 08-Feb-2010 Revision Date 14-Feb-2020 Revision Number 3

1. Identification

Product Name Lithium acetylide ethylenediamine complex

Cat No. : L12401

**CAS-No** 6867-30-7

Synonyms 1,2-Ethanediamine, compound with lithium acetylide (Li(C2H)) (1:1); Lithium acetylide

Recommended Use Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

#### Company

Alfa Aesar

Thermo Fisher Scientific Chemicals, Inc.

30 Bond Street

Ward Hill, MA 01835-8099

Tel: 800-343-0660 Fax: 800-322-4757 **Email:** tech@alfa.com

www.alfa.com

### **Emergency Telephone Number**

During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660.

After normal business hours, call Carechem 24 at (866) 928-0789.

# 2. Hazard(s) identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Substances/mixtures which, in contact with water, emit Category 1

flammable gases

Acute oral toxicity

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Category 1

Category 1

Category 3

Target Organs - Respiratory system.

### **Label Elements**

#### Signal Word

Danger

#### **Hazard Statements**

In contact with water releases flammable gases which may ignite spontaneously

Harmful if swallowed

Causes severe skin burns and eye damage May cause respiratory irritation



#### **Precautionary Statements**

#### Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Keep away from any possible contact with water, because of violent reaction and possible flash fire

Handle under inert gas. Protect from moisture

## Response

Immediately call a POISON CENTER or doctor/physician

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Brush off loose particles from skin. Immerse in cool water/wrap with wet bandages

#### **Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

# Ingestion

Rinse mouth

Do NOT induce vomiting

#### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

### Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Store in a dry place. Store in a closed container

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

Reacts violently with water

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
1,2-Ethanediamine, compound with lithium	6867-30-7	>80
acetylide (Li(C2H)) (1:1)		

# 4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

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

Immediate medical attention is required. Keep eye wide open while rinsing.

**Skin Contact**Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a physician immediately.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison

control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a

one-way valve or other proper respiratory medical device.

Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water.

Never give anything by mouth to an unconscious person.

Most important symptoms and

effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric

lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media Limestone powder. Dry chemical.

Unsuitable Extinguishing Media DO NOT USE WATER, FOAM OR CO2

Flash Point No information available Method - No information available

**Autoignition Temperature** 

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

The product causes burns of eyes, skin and mucous membranes. Reacts violently with water.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx).

## **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. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA** 

Health Flammability Instability Physical hazards

# 6. Accidental release measures

Personal Precautions

Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid

contact with skin, eyes or clothing.

Environmental Precautions Should not be released into the environment. Do not allow material to contaminate ground

water system.

**Methods for Containment and Clean** Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Do not **Up** expose spill to water.

### 7. Handling and storage

Handling Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on

clothing. Use only under a chemical fume hood. Do not breathe dust. Do not indest. If swallowed then seek immediate medical assistance. Do not allow contact with water.

Storage

Corrosives area. Flammables area. Keep away from heat, sparks and flame. Keep refrigerated. Store under an inert atmosphere. Keep away from water or moist air. Keep container tightly closed in a dry and well-ventilated place.

### 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

**Engineering Measures** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers

are close to the workstation location. Use explosion-proof

electrical/ventilating/lighting/equipment.

**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.

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

# 9. Physical and chemical properties

**Physical State** Solid **Appearance** Beige

Odor Amine compounds **Odor Threshold** No information available

No information available Melting Point/Range 76 °C / 168.8 °F 110.6 °C / 231.1 °F **Boiling Point/Range** Flash Point No information available

Not applicable **Evaporation Rate** 

No information available Flammability (solid,gas) Flammability or explosive limits

**Upper** No data available

Lower No data available **Vapor Pressure** No information available **Vapor Density** Not applicable

**Specific Gravity** No information available Solubility Reacts with water No data available

Partition coefficient; n-octanol/water

**Autoignition Temperature Decomposition Temperature** 40 °C

Not applicable **Viscosity** Molecular Formula C4 H9 N2 Li **Molecular Weight** 92.07

# 10. Stability and reactivity

### Lithium acetylide ethylenediamine complex

Reactive Hazard Yes

Stability Reacts violently with water. heat sensitive. Moisture sensitive.

**Conditions to Avoid** Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition. Avoid dust formation. Exposure to moist air or water. Temperatures

above 40°C. Exposure to moisture.

Acids, Alcohols, Carbon dioxide (CO2), Water, copper, Copper alloys, Oxidizing agent **Incompatible Materials** 

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** Reacts violently with water.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

637-1850 mg/kg (rat) **LD50 Oral VALUE** 

Category 4. ATE = 300 - 2000 mg/kg. Oral LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg. **Dermal LD50** Mist LC50 Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.

**Component Information** 

**Toxicologically Synergistic** 

**Products** 

No information available

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

Irritation Causes severe burns by all exposure routes

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1,2-Ethanediamine, compound with lithium acetylide (Li(C2H))	6867-30-7	Not listed				
(1:1)						

No information available **Mutagenic Effects** 

No information available. **Reproductive Effects** 

**Developmental Effects** No information available.

No information available. **Teratogenicity** 

STOT - single exposure Respiratory system STOT - repeated exposure None known

No information available **Aspiration hazard** 

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

Ecotoxicity

Do not empty into drains. .

Persistence and Degradability

Bioaccumulation/ Accumulation

No information available.

Mobility

No information available.

# 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.

# 14. Transport information

DOT

UN-No UN3131

**Proper Shipping Name** Water-reactive solid, corrosive, n.o.s.

Technical Name 1,2-Ethanediamine, compound with lithium acetylide (Li(C2H)) (1:1)

Hazard Class 4.3 Subsidiary Hazard Class 8 Packing Group 1

TDG

UN-No UN3131

**Proper Shipping Name** Water-reactive solid, corrosive, n.o.s.

Hazard Class 4.3 Subsidiary Hazard Class 8 Packing Group 1

<u>IATA</u>

UN-No UN3131

**Proper Shipping Name** Water-reactive solid, corrosive, n.o.s.

Hazard Class 4.3 Subsidiary Hazard Class 8 Packing Group 1

IMDG/IMO

UN-No UN3131

**Proper Shipping Name** Water-reactive solid, corrosive, n.o.s.

Hazard Class 4.3 Subsidiary Hazard Class 8 Packing Group 1

# 15. Regulatory information

## **United States of America Inventory**

Component	CAS-No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
1,2-Ethanediamine, compound with lithium acetylide (Li(C2H))	6867-30-7	X	ACTIVE	-
$(1:1) \qquad \qquad \square$				

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

Component	CAS-No	DSL	NDSL	EINECS	PICCS	ENCS	AICS	IECSC	KECL
1,2-Ethanediamine, compound	6867-30-7	-	Х	229-967-9	Χ	-	-	-	-
with lithium acetylide (Li(C2H))									
(1:1)									

### U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

**Health Administration** 

Not applicable

CERCLA Not applicable

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

U.S. State Right-to-Know

Regulations

Not applicable

**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 information available

# 16. Other information

Prepared By Health, Safety and Environmental Department

Email: tech@alfa.com

www.alfa.com

 Creation Date
 08-Feb-2010

 Revision Date
 14-Feb-2020

 Print Date
 14-Feb-2020

**Revision Summary** SDS authoring systems update, replaces ChemGes SDS No. 6867-30-7/2.

#### Disclaimer

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 a 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

Revision	Date	14-Feb	-2020
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**End of SDS** 

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