# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 3.1 Revision Date 10/06/2008 Print Date 07/28/2010

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : L-Lysine

Product Number : W384704 Brand : Aldrich

Company : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

Telephone : +18003255832 Fax : +18003255052 Emergency Phone # : (314) 776-6555

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : (S)-2,6-Diaminocaproic acid

Formula :  $C_6H_{14}N_2O_2$ Molecular Weight : 146.19 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
L-Lysine			
56-87-1	200-294-2	-	-

# 3. HAZARDS IDENTIFICATION

# **Emergency Overview**

#### **OSHA Hazards**

No known OSHA hazards

# **HMIS Classification**

Health Hazard: 0 Flammability: 0 Physical hazards: 0

#### NFPA Rating

Health Hazard: 0
Fire: 0
Reactivity Hazard: 0

### **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

# 4. FIRST AID MEASURES

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

#### In case of skin contact

Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIRE-FIGHTING MEASURES

#### Flammable properties

Flash point no data available
Ignition temperature no data available

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 6. ACCIDENTAL RELEASE MEASURES

#### **Personal precautions**

Avoid dust formation.

#### **Environmental precautions**

Do not let product enter drains.

#### Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

### Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Storage

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

# **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

For prolonged or repeated contact use protective gloves.

### Eye protection

Safety glasses

#### **Hygiene measures**

General industrial hygiene practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

### **Appearance**

Form solid

Safety data

pH no data available
Melting point 215 °C (419 °F)
Boiling point no data available

Flash point no data available
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Water solubility no data available

#### 10. STABILITY AND REACTIVITY

# Storage stability

Stable under recommended storage conditions.

### Materials to avoid

Strong oxidizing agents

### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

# 11. TOXICOLOGICAL INFORMATION

# **Acute toxicity**

no data available

### Irritation and corrosion

no data available

### Sensitisation

no data available

#### Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as

a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as

a carcinogen or potential carcinogen by OSHA.

# Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **Potential Health Effects**

InhalationMay be harmful if inhaled. May cause respiratory tract irritation.SkinMay be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

#### 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

no data available

#### **Ecotoxicity effects**

no data available

### Further information on ecology

no data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Observe all federal, state, and local environmental regulations.

# Contaminated packaging

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

#### DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### IATA

Not dangerous goods

### 15. REGULATORY INFORMATION

#### **OSHA Hazards**

No known OSHA hazards

#### **DSL Status**

All components of this product are on the Canadian DSL list.

### **SARA 302 Components**

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

### **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

No SARA Hazards

#### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

CAS-No.

L-Lysine 56-87-1

**New Jersey Right To Know Components** 

CAS-No. Revision Date

L-Lysine 56-87-1

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

### 16. OTHER INFORMATION

#### **Further information**

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**Revision Date**