# **Material Safety Data Sheet**

Version 4.0 Revision Date 08/09/2010 Print Date 03/22/2011

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : L-Alanine hydrochloride solution

Product Number : 55329 Brand : Fluka

Company : Sigma-Aldrich

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USA

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## 2. 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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula :  $C_3H_7NO_2 \cdot HCI$ 

CAS-No.	EC-No.	Index-No.	Concentration
L-Alanine hydrochloride			
•			
6003-05-0	227-849-1	-	>= 1.2 - <= 1.3 %
		·	
Water			
7732-18-5	231-791-2	-	>= 98.7 - <= 98.8 %

## 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.

Fluka - 55329 Page 1 of 5

## 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

#### 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 breathing vapors, mist or gas.

## **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

### 7. HANDLING AND STORAGE

## Precautions for safe handling

Normal measures for preventive fire protection.

## Conditions for safe storage

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

Recommended storage temperature: 2 - 8 °C

Store under inert gas.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

## Personal protective equipment

#### Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. 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 clear, liquid Colour colourless

## Safety data

pH no data available

Melting point no data available

Fluka - 55329 Page 2 of 5

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

Density 1.003 g/cm3 at 20 °C (68 °F)

Water solubility no data available

## 10. STABILITY AND REACTIVITY

## **Chemical stability**

Stable under recommended storage conditions.

#### Conditions to avoid

no data available

#### Materials to avoid

Strong oxidizing agents

## **Hazardous decomposition products**

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

## 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

Eyes: no data available

#### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

## Carcinogenicity

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.

#### Reproductive toxicity

no data available

## Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

## Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Fluka - 55329 Page 3 of 5

## **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

#### Signs and Symptoms of Exposure

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

#### **Additional Information**

#### 12. ECOLOGICAL INFORMATION

### **Toxicity**

no data available

## Persistence and degradability

no data available

### Bioaccumulative potential

no data available

#### Mobility in soil

no data available

## PBT and vPvB assessment

no data available

#### Other adverse effects

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**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

CAS-No.

6003-05-0

Page 4 of 5

## SARA 302 Components

L-Alanine hydrochloride

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

Fluka - 55329

## **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

Water CAS-No. Revision Date 7732-18-5

**Revision Date** 

**New Jersey Right To Know Components** 

Water CAS-No. 7732-18-5
L-Alanine hydrochloride 6003-05-0

#### California Prop. 65 Components

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

#### 16. OTHER INFORMATION

#### **Further information**

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Fluka - 55329 Page 5 of 5