# **Material Safety Data Sheet**

Version 4.0 Revision Date 04/07/2010 Print Date 09/16/2011

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : L-Tryptophan

Product Number : T0254

Brand : Sigma-Aldrich

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**

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.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : (S)-2-Amino-3-(3-indolyl)propionic acid

L-α-Amino-3-indolepropionic acid

Formula :  $C_{11}H_{12}N_2O_2$ Molecular Weight : 204.23 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
L-Tryptophan			
73-22-3	200-795-6	-	-

#### 4. FIRST AID MEASURES

#### If inhaled

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

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#### 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

### 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 and materials for containment and cleaning up

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

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

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

#### Conditions for safe 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 crystalline
Colour white

# Safety data

pH no data available

Melting point 280 - 285 °C (536 - 545 °F)

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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

#### **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)

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

LD50 Oral - rat - > 16,000 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Eye: Ptosis. Behavioral: Coma. Nutritional and Gross Metabolic: Changes in: Body temperature decrease.

#### Skin corrosion/irritation

no data available

#### Serious eye damage/eye irritation

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 (GHS)

no data available

### Specific target organ toxicity - repeated exposure (GHS)

no data available

### **Aspiration hazard**

no data available

### Potential health effects

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**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

The Food and Drug Administration and the Center for Disease Control have established a link between I-tryptophan and a sometimes fatal blood disorder called eosinophilia-myalgia syndrome which is marked by severe muscle and joint pain, swelling of the arms and legs, skin rash, and sometimes fever. It is characterized by severe eosinophillia, a blood disorder in which the white blood cells increase to an abnormally high level. I-Tryptophan occurs naturally in many foods and investigation has not established whether it or an impurity introduced during manufacture or distribution is the cause.

### **Additional Information**

RTECS: YN6130000

#### 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**

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.

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# **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

L-Tryptophan CAS-No. Revision Date 73-22-3

**New Jersey Right To Know Components** 

L-Tryptophan CAS-No. Revision Date 73-22-3

# 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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