# SIGMA-ALDRICH

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 3.1 Revision Date 11.12.2008 Print Date 16.01.2009

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name : L-Leucine

Product Number : L8000 Brand : Sigma

Company : Sigma-Aldrich Chemie GmbH

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#### 2. HAZARDS IDENTIFICATION

This substance is not classified as dangerous according to Directive 67/548/EEC.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : (S)-2-Amino-4-methylpentanoic acid

Formula :  $C_6H_{13}NO_2$ Molecular Weight : 131,17 g/mol

CAS-No.	EC-No.	Index-No.	Classification	Concentration
L-Leucine				
61-90-5	200-522-0	-	-	-

# 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

# 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.

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## **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

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

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 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 powder Colour white

# Safety data

pH no data available

Melting point > 300 °C

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

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#### 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**

LD50 Intraperitoneal - rat - 5.379 mg/kg

Remarks: Lungs, Thorax, or Respiration:Dyspnea. Nutritional and Gross Metabolic:Changes in:Body temperature decrease.

## 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.

# Signs and Symptoms of Exposure

The levorotary (I) forms of leucine, isoleucine, and valine have been found to have tumor-promoting activity for bladder carcinomas., 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

#### ADR/RID

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### IATA

Not dangerous goods

# 15. REGULATORY INFORMATION

# Labelling according to EC Directives

Further information:

The product does not need to be labelled in accordance with EC directives or respective national laws.

## 16. OTHER INFORMATION

#### **Further information**

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