# SAFETY DATA SHEET

## L-Valine

The information is provided as a service to our customers and is intended only for their use. This information is based on technical information believed to be reliable and will be revised as new knowledge or experience is gained.

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## 1. Chemical Product and Company Identification

### 1.1. Identification of the substance:

L-Valine

### 1.2. Use of the substance:

Various use (drugs, nutritional, industrial)

### 1.3. Company identification:

- **Manufacturer’s Name:** Ajinomoto North America, Inc. / Shanghai Ajinomoto Amino Acid Co., Ltd.  
- **Ajinomoto do Brasil Indústria e Comércio de Alimentos Ltda.**

### 1.4. Contact for Correspondence Japan:

- **Ajinomoto Co., Ltd.**
  - 15-1, Kyobashi 1-chome, Chuo-ku, Tokyo 104-8315, Japan  
  - **Tel N°:** +81-(0)3-5250-5392  
  - **Fax N°:** +81-(0)3-5250-0079

### 1.5. Contact for Correspondence China:

- **Ajinomoto(China) Co., Ltd.**
  - 718 Rongle Dong Road, Songjiang, Shanghai 201613 P.R. China  
  - **Tel N°:** +86 21 5774-5353  
  - **Fax N°:** +86 21 5774-0433

### 1.6. Contact for Correspondence Brazil:

- **Ajinomoto do Brasil Indústria e Comércio de Alimentos Ltda.**
  - Rua Vergueiro, 1737, Vila Mariana, 04101-001 – São Paulo – SP, Brazil 1348 Louvain-la-Neuve, Belgium  
  - **Tel N°:** +55 11 5080-6700  
  - **Fax N°:** +55 11 5080-6789

### 1.7. Contact for Correspondence USA:

- **Ajinomoto North America, Inc.**
  - 4020 Ajinomoto Drive, Raleigh, N.C. 27610, U.S.A.  
  - **Tel N°:** +919-325-1400  
  - **Fax N°:** +919-325-1420

### 1.8. Contact for Correspondence Europe:

- **Ajinomoto Omnichem N.V.**
  - Industrial Research Park Fleming 1348 Louvain-la-Neuve, Belgium  
  - **Tel N°:** +32 10 483222  
  - **Fax N°:** +32 10 456227

### 1.9. Contact for Correspondence Asia:

- **Ajinomoto Co., (Hong Kong) Ltd.**
  - Room 2102, 21F., Bangkok Bank Bldg.  
  - **Tel N°:** +852 2534-2888  
  - **Fax N°:** +852 2534-2899

### 1.10. Contact for Correspondence Canada, Alaska and Virgin Islands:

- **CHEMTREC** at 1-800-424-9300.

## 2. Hazards Identification

### GHS Classification of the substance

| Physical hazards: | Not applicable |
| Health hazards: | Not applicable |
| Environmental hazards: | Not applicable |
| Label elements: | Not applicable |
| Potential effects: | May cause eye and skin irritation. |
| It will increase the biological oxygen demand (BOD) of water. |

## 3. Composition, Information on Ingredients

| Substance or Mixture: | Substance |
| Common Chemical name: | L-Valine |
| Synonyms: | (2S)-2-Amino-3-methylbutanoic acid |
| Formula: | C5H11NO2 |
| Molecular Weight: | 117.15 |
| Composition: | 98.5 – 101.0% |
| CAS No.: | 72-18-4 |
| EINECS No.: | 200-773-6 |
| IUPAC: | L-Val |

## 4. First-Aid Measures

### Inhalation:

Immediately relocate to a fresh air environment. Rinse mouth with water. If not breathing, give artificial respiration. If breathing becomes difficult, give oxygen and seek medical attention.

### Skin Contact:

Wash with soap and copious amounts of water. If irritation persists, seek medical attention.

### Eye Contact:

Immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. If contact lenses are being worn, remove lenses and continue rinsing. Seek medical attention.

### Ingestion:

Rinse mouth with water and seek medical attention.
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5. Fire-fighting measures
Flash point (method used): Not known
Flammable limits: Not known
Extinguishing media: Water spray, carbon dioxide, dry chemical powder/foam
Special fire fighting procedures: Minimize dust formation
Unusual fire and explosion hazards: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Upon combustion will result in carbon monoxide, carbon dioxide and nitrogen oxide being released.

6. Accidental release measures
Personal precautions, protective equipment: Use personal protection, see section 8.
Precautions for the environment: Do not discharge into sewer, river, underground water, etc.
Recovery, neutralization: Make spills wet to prevent the generation of dust and then, sweep up into a closed container.
Method for containment and clean-up: After recovering, wash away spilled area with plenty of water.

7. Handling and storage
7.1. Handling: Follow good industrial practice in housekeeping and personal hygiene. Wear personal protective equipment as outlined in section 8.
7.2. Storage: Store in closed containers in a dry area. Avoid humidity, sunlight and high temperature.

8. Exposure controls/personal protection
Respiratory protection: Dust mask or appropriate respirator. Utilize local exhaust ventilation.
Protective gloves: Rubber
Eye protection: Chemical safety goggles
Other protective equipment: Wear appropriate laboratory apparel, protect exposed skin.
Occupational exposure limits: Not established

9. Physical and chemical properties
Appearance: White crystals or crystalline powder
Melting point: 315°C
Solubility: 5.75 g/100g H₂O (20°C)
PH: 5.5-6.5 (0.5g in 20mL of H₂O)

10. Stability and reactivity
Stability: Stable under normal temperature and pressures
Conditions to avoid: Humidity and high temperature
Incompatibility (Materials to avoid): Strong oxidizing agents
Hazardous decomposition products: Nitrogen oxides (combustion)
Hazardous Polymerization: Will not occur

11. Toxicological information
Acute oral toxicity: LD₅₀ > 16 g/kg rat
Sensitization: No data available
Mutagenicity: No data available
Primary skin irritation: May cause skin irritation. No specific data available
Primary eye irritation: May cause eye irritation. No specific data available

12. Ecological information
Toxic effects to fish, algae, and daphnia: No data available
Potential for bioaccumulation: No data available
Biodegradability: BOD= 0.846 g/g
WGK class (Europe): 1 (group classification according to VwVwS / 17 May 1999, Germany)

13. Disposal considerations
Dispose of the material as you would with a non-hazardous material in accordance with all applicable national, state and local regulations.
14. **Transport information**
Avoid humidity and high temperature. Prevent damage of the container.
UN-Classification: Not classified
US Department of Transportation proper shipping name: L-Valine
US NMFC classification: Item 60,000 / class 70

15. **Regulatory information**
None especially.
The information given in this Safety Data Sheet does not replace the users own assessment of workplace risk as required by national, state and local health and safety legislation.

16. **Other information**
The information contained in this SDS is, to the best of our knowledge true and accurate. Any recommendations or suggestions made are without guarantee, since the conditions of use are beyond our control.