



Health	0
Fire	0
Reactivity	0
Personal Protection	0

Material Safety Data Sheet

L-Valine

1: Chemical Product and Company Identification

Product Name: L-Valine

Catalog Code: 42290000-1, 42290000-2, 42290000-3

CAS#: 72-18-4

RTECS: YV9361000

TSCA: TSCA 8(b) inventory : L-Valine

CI#: Not available.

Synonym: L-alpha-Amino-beta-methylbutyric acid; (S)-2-Amino-3-methylbutanoic acid; (S)-2-Amino-3-methylbutyric acid; (S)-alpha-Amino-beta-methylbutyric acid; 2-Amino-3-methylbutanoic acid; Butanoic acid, 2-amino-3-methyl-, (S)-; L-Valine; (S)-Valine.

Chemical Name: L-Valine

Chemical Formula: C₅H₁₁NO₂

Contact information:

bioWORLD

4150 Tuller Rd

Suite 228, Dublin, OH 43017, USA

For information, call: 614-792-8680

Fax Number: 614-792-8685

Order Online: www.bio-world.com

E-mail : save@bio-world.com

In case of a chemical emergency, contact local hospital.

For non-emergency assistance, call: 1-800-860-9729

2: Composition and Information on Ingredients

Composition:

Name

L-Valine

CAS#

72-18-4

% by Weight

-

Toxicological Data on Ingredients:

Not available.

3: Hazards Identification

Potential Acute Health Effects: May cause eye and skin irritation. May cause respiratory and digestive tract irritation. The toxicological properties of this material have not been fully investigated.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Suspected mutagen.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

4: First Aid Measures

Eye Contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Serious Inhalation: Not available.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Serious Ingestion: Not available.

5: Fire and Explosion Data

Flammability of the Product: Noncombustible.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Product of Combustion: Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Fire Hazards in Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances:
Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Dry chemical powder.

LARGE FIRE: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

6: Accidental Release Measures

Small Spill: Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7: Handling and Storage

Precautions: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage: Keep tightly closed.

8: Exposure Controls/Personal Protection

Engineering Controls: Safety shower and eye bath. Mechanical exhaust required.

Personal Protection: Respiratory: Wear dust mask.

Hand: Protective gloves.

Eye: Chemical safety goggles.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Boots. Dust respirator. Gloves.

Exposure Limits: Not available.

9: Physical and Chemical Properties

Physical State and Appearance: Solid (Powder).

Odor: Not available.

Taste: Not available.

Molecular Weight: 117.15 g/mole

Color: White.

pH(1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: 295 - 300 °C

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapour Pressure: Not available.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Not available.

10: Stability and Reactivity Data

Stability: Stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Strong oxidizing agents.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

11: Toxicological Information

Routes of Entry: Skin contact. Eye contact. Ingestion. Inhalation.

Toxicity to Animals:

Not available.

Chronic Effects on Humans: Mutagen : Sister chromatid exchange.

Other Toxic Effects on Humans: Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: The levorotary (l) forms of leucine, isoleucine, and valine have been found to have tumor-promoting activity for bladder carcinomas. [Science 231, 843, 21 February 1986]. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Special Remarks on other Toxic Effects on Humans: Not available.

12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Product of Biodegradation: Not available.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

13: Disposal Considerations

Waste Disposal: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14: Transport Information

DOT Classification: Not a DOT controlled material.

Identification: Not available.

Special Provisions for Transport: Not available.

15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory : L-Valine

Other Regulations: Not available.

Other Classifications:

WHMIS(Canada): Not available.

DSCL(EEC): Not available.

HMIS(U.S.A.):

Health Hazard: 0

Fire Hazard: 0

Reactivity: 0

Personal Protection:

National Fire Protection Association (U.S.A.):

Health: 0

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety goggles.

16: Other Information

References: Not available.

Other Special Considerations: Not available.

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