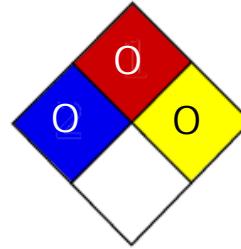




"Chemicals, Reagents & BioAffinity Matrix"



Health	0
Fire	0
Reactivity	0
Personal Protection	

## Material Safety Data Sheet

### L-Valine

#### 1: Chemical Product and Company Identification

**Product Name:** L-Valine

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

**Contact information:**

**CAS#:** 72-18-4

**bioWORLD**

**RTECS:** YV9361000

4150 Tuller Rd

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

Suite 228, Dublin, OH 43017, USA

**CI#:** Not available.

For information, call: 614-792-8680

Fax Number: 614-792-8685

Order Online:[www.bio-world.com](http://www.bio-world.com)

**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.

E-mail : [save@bio-world.com](mailto:save@bio-world.com)

**Chemical Name:** L-Valine

**In case of a chemical emergency, contact local hospital.**

**Chemical Formula:** C<sub>5</sub>H<sub>11</sub>NO<sub>2</sub>

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

#### 2: Composition and Information on Ingredients

**Composition:**

**Name**

**CAS#**

**% by Weight**

L-Valine

72-18-4

-

**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.

**Created:** 24/08/2006 3:59:47 PM

**Last Updated:** 17/12/2008 4:00:20 PM

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