Material Safety Data Sheet
DL-valine, 99+% 

ACC# 83707

Section 1 - Chemical Product and Company Identification 

MSDS Name: DL-valine, 99+%
Catalog Numbers: AC172100000, AC172100500, AC172102500, A4923305, A4923307, V0025
Synonyms: Val, DL-2-Amino-3-methylbutyric acid
Company Identification:
Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>516-06-3</td>
<td>DL-Valine</td>
<td>99+</td>
<td>208-220-0</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white solid.
Caution! May cause irritation. The toxicological properties of this material have not been fully investigated.
Target Organs: None known.

Potential Health Effects
Eye: No information regarding eye irritation and other potential effects was found.
Skin: No information regarding skin irritation and other potential effects was found.
Ingestion: The toxicological properties of this substance have not been fully investigated.
Inhalation: The toxicological properties of this substance have not been fully investigated.
Inhalation of dust may cause respiratory tract irritation.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing
contaminated clothing and shoes. **Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. **Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. **Notes to Physician:** Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. **Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam. **Flash Point:** Not available. **Autoignition Temperature:** Not available. **Explosion Limits, Lower:** Not available. **Upper:** Not available. **NFPA Rating:** Not published.

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

### Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. **Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low. **Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL-Valine</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** DL-Valine: No OSHA Vacated PELs are listed for this chemical. **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. **Skin:** Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

### Section 9 - Physical and Chemical Properties

**Physical State:** Solid  
**Appearance:** white  
**Odor:** practically odorless  
**pH:** Not available.  
**Vapor Pressure:** Not available.  
**Vapor Density:** Not available.  
**Evaporation Rate:** Not available.  
**Viscosity:** Not available.  
**Boiling Point:** Not available.  
**Freezing/Melting Point:** 283.5 - 285 deg C  
**Decomposition Temperature:** > 230 deg C  
**Solubility:** SOLUBLE IN WATER: 68 G/L (20°C)  
**Specific Gravity/Density:** 1.3160g/cm³  
**Molecular Formula:** C5H11NO2  
**Molecular Weight:** 117.15

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, dust generation.  
**Incompatibilities with Other Materials:** Oxidizing agents  
**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, carbon dioxide.  
**Hazardous Polymerization:** Has not been reported.

### Section 11 - Toxicological Information

**RTECS#:**  
**CAS# 516-06-3 unlisted.**  
**LD50/LC50:** Not available.  

**Carcinogenicity:**  
**CAS# 516-06-3:** Not listed by ACGIH, IARC, NTP, or CA Prop 65.  

**Epidemiology:** No data available.  
**Teratogenicity:** No data available.  
**Reproductive Effects:** No data available.  
**Neurotoxicity:** No data available.  
**Mutagenicity:** No data available.  
**Other Studies:** No data available.
Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.
RCRA U-Series: None listed.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>Shipping Name:</th>
<th>US DOT</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please contact Fisher Scientific for shipping information</td>
<td>No information available.</td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Number:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 15 - Regulatory Information

US FEDERAL

TSCA
   CAS# 516-06-3 is listed on the TSCA inventory.

Health & Safety Reporting List
   None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
   None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
   None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule
   None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs
   None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances
   None of the chemicals in this product have a TPQ.

Section 313
   No chemicals are reportable under Section 313.

Clean Air Act:
   This material does not contain any hazardous air pollutants.
   This material does not contain any Class 1 Ozone depleters.
   This material does not contain any Class 2 Ozone depleters.

Clean Water Act:
   None of the chemicals in this product are listed as Hazardous Substances under the CWA.
   None of the chemicals in this product are listed as Priority Pollutants under the CWA.

https://fscimage.fishersci.com/msds/83707.htm

2/2/2005
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
CAS# 516-06-3 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**
**European Labeling in Accordance with EC Directives**
**Hazard Symbols:**
Not available.

**Risk Phrases:**

**Safety Phrases:**
S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**
CAS# 516-06-3: 0

**Canada - DSL/NDSL**
CAS# 516-06-3 is listed on Canada’s DSL List.

**Canada - WHMIS**
WHMIS: Not available.

**Canadian Ingredient Disclosure List**

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**Section 16 - Additional Information**

**MSDS Creation Date:** 9/02/1997
**Revision #2 Date:** 3/18/2003

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