



Health	1
Fire	1
Reactivity	0
Personal Protection	E

## Material Safety Data Sheet

### (S)-(-)-2-Amino-4-Pentenoic Acid, 98% MSDS

#### Section 1: Chemical Product and Company Identification

**Product Name:** (S)-(-)-2-Amino-4-Pentenoic Acid, 98%

**Catalog Codes:** SLA3463

**CAS#:** 16338-48-0

**RTECS:** Not available.

**TSCA:** Not listed.

**CI#:** Not available.

**Synonyms:** L-Allylglycine; L-C-Allylglycine.

**Chemical Names:** Not available.

**Chemical Family:** Not available.

**Chemical Formula:** C<sub>5</sub>H<sub>9</sub>NO<sub>2</sub>

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

#### Section 2: Composition and Information on Ingredients

**Composition:**

CAS#	Chemical Name	Percent
16338-48-0	(S)-(-)-2-Amino-4-Pentenoic Acid	98

**Hazard Symbols:** XI

**Risk Phrases:** 36/37/38

#### Section 3: Hazards Identification

**EMERGENCY OVERVIEW:**

**Warning!:** Causes eye and skin irritation. Causes digestive and respiratory tract irritation. The toxicological properties of this material have not been fully investigated.

**Target Organs:** None known.

**Potential Health Effects:**

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** Causes respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

**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.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**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 immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically and supportively.

#### Section 5: Fire and Explosion Data

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** 283 deg C ( 541.40 deg F)

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** N/A

**Upper:** N/A

**NFPA Rating:** Not published.

#### Section 6: Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

#### Section 7: Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Wash clothing before reuse.

**Storage:** Store in a cool, dry place. Keep container closed when not in use. Keep refrigerated. (Store below 4i½C/39i½F.)

#### Section 8: Exposure Controls/Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

**Exposure Limits:**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
(S)-(-)-2-Amino-4-Pentenoic Acid	none listed	none listed	none listed

**OSHA Vacated PELs:** (S)-(-)-2-Amino-4-Pentenoic Acid: 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 minimize contact with skin.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**Section 9: Physical and Chemical Properties**

**Physical State:** Solid

**Appearance:** white

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** 3.97

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 283 deg C

**Decomposition Temperature:** 283 deg C

**Solubility:** Not available.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C<sub>5</sub>H<sub>9</sub>NO<sub>2</sub>

**Molecular Weight:** 115.13

**Section 10: Stability and Reactivity Data**

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, excess heat, strong oxidants.

**Incompatibilities with Other Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

**Hazardous Polymerization:** Has not been reported

### Section 11: Toxicological Information

**RTECS#:**

**CAS#:** 16338-48-0 unlisted.

**LD50/LC50:** Not available.

**Carcinogenicity:** CAS# 16338-48-0: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.

**Mutagenicity:** No information available.

**Other Studies:** No data available.

### Section 12: Ecological Information

### Section 13: Disposal Considerations

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

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

### Section 14: Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

### Section 15: Other Regulatory Information

**US FEDERAL:**

**TSCA:** CAS# 16338-48-0 is not listed on the TSCA inventory. It is for research and development use only.

**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.

**SARA:**

**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. 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# 16338-48-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ. 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:** XI

**Risk Phrases:** R 36/37/38 Irritating to eyes, respiratory system and skin.

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

**WGK (Water Danger/Protection):** CAS# 16338-48-0: No information available.

**Canada - DSL/NDSL:** None of the chemicals in this product are listed on the DSL or NDSL list.

**Canada - WHMIS:** This product has a WHMIS classification of D2B.

**Canadian Ingredient Disclosure List:**

**Exposure Limits:**

**HMIS (U.S.A.):**

**Health Hazard:** 1

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** E

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

**Health:** 1

**Flammability:** 1

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

## Section 16: Other Information

**Created:** 04/19/2005 12:24 PM

**Last Updated:** 11/01/2010 12:00 PM

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