BIOSPECTRA

# Safety Data Sheet
# L-Leucine

## Section 1 - Chemical Product and Company Identification

**1.1 Product Identifiers**

**Product Name:** L-Leucine
**Catalog Numbers:**
**CAS #. :** 61-90-5
**EC#:** 200-522-0
**RTECS#:** NA

**1.2 Recommended Use of the Chemical and restrictions of Use**

Chemical manufacturing

**1.3 Supplier Details**

BioSpectra, Inc.
100 Majestic Way
Bangor, Pa 18013
610.599.3400

**1.4 Emergency Numbers**

**US & Canada:** 1-800-424-9300
**Outside the US & Canada:** +1 703-527-3887

## Section 2 – Hazard Identification

**2.1 Classification of Substance or Mixture**

Not a hazardous substance or mixture

**2.2 GHS Label Elements Including Precautionary Statements**

Not a hazardous substance or mixture

**2.3 Hazards not Classified or not Covered by the GHS**

None

## Section 3 – Composition, Information on Ingredients

| Component | Classificatiion | Concentration |
|---|---|---|
| L-Leucine | NA | >98.5% |

**Synonyms:** (S)-2-Amino-4-methylpentanoic acid

**Formula:** $C_6H_{13}NO_2$

**Molecular Weight:** 131.17 g/mol

## Section 4 - First Aid Measures

**4.1 Description of necessary first aid measures**

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.
**Skin:** Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
**Ingestion:**. DO NOT induce vomiting unless instructed to do so by a medical professional. Never give anything by mouth to an unconscious person. Get medical aid immediately.
**Inhalation:** Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
**Notes to Physician:** Treat symptomatically and supportively.

**4.2 Most Important symptoms/effects, acute and delayed**

Refer to Section 2.2 for Precautionary Statements if any are applicable

**4.3 Indication of Immediate Medical Attention and Special Treatment**

No information available

## Section 5 - Firefighting Measures

**5.1 Extinguishing Media**

Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Specific Hazards Associated with this Chemical**

Carbon oxides, nitrogen oxides (NOx)

**5.3 Special Equipment/Precautions for Firefighters**

May be combustible at high temperatures. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Explosion will appear as fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**5.4 Other information**

None available

## Section 6 - Accidental Release Measures

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Avoid dust formation. Avoid breathing vapours, mist or gas. Use proper personal protective equipment as indicated in Section 8.

**6.2 Environmental Precautions**

Do not allow to enter drains

**6.3 Methods and Materials for Containment and Cleaning Up**

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

**6.4 Other information**

None available

## Section 7 - Handling and Storage

**7.1 Precautions for safe handling**

Use with adequate ventilation. Take into consideration the avoidance of formation of combustible dust before processing. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

**7.2 Conditions for Storage Including any Incompatibilities**

Store in a dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

**7.3 Other information**

None available.

## Section 8 - Exposure Controls, Personal Protection

**8.1 Control parameters**

Chemical does not contain any substances with occupational exposure limits

**8.2 Engineering controls**

Use adequate ventilation to keep airborne concentrations low.

**8.3 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. Wear impervious gloves: Nitrile rubber with layer thickness 0.11mm.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Where protection from nuisance levels of dusts are desired, use type N95
(US) or type P1 (EN 143) dust masks. 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 | **Melting Point:** >300 ° C |
| **Appearance:** White | **Boiling Point:** Not available |
| **Odor:** Not available | **Decomposition Temperature:** Not available |
| **pH:** Not available | **Specific Gravity/Density:** Not available |
| **Vapor Pressure:** Not available | **Solubility:** Not available |
| **Vapor Density:** Not available | **Molecular Formula:** $C_6H_{13}NO_2$ |
| **Viscosity:** Not available | **Molecular Weight:** 131.17 g/mol |

## Section 10 - Stability and Reactivity

**10.1 Chemical Stability**

Stable under normal temperatures and pressures.

**10.2 Conditions to Avoid**

No information available.

**10.3 Incompatibilities with Other Materials**

Strong oxidizing agents

**10.4 Hazardous Decomposition Products**

No information available.

**10.5 Hazardous Polymerization**

Will not occur.

## Section 11 - Toxicological Information

**11.1 Toxicological effects**

**Acute Toxicity**

LD50 Intraperitoneal: rat: 5,379 mg/kg
Remarks: Lungs, Thorax, or Respiration:Dyspnea. Nutritional and Gross Metabolic:Changes in:Body temperature decrease.

**Carcinogenicity:**

CAS# 61-90-5: 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 information available.

**11.2 Additional information**

**RTECS#:** NA

The levorotary (l) forms of leucine, isoleucine, and valine have been found to have tumor-promoting activity for bladder carcinomas.

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

## Section 12 - Ecological Information

**12.1 Ecotoxicity**

No information available.

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative Potential**

No information available

**12.4 Mobility in Soil**

No information available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other Adverse Effects**

No information available

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

| | US DOT | IATA | RID/ADR | IMO | Canada TDG |
|---|---|---|---|---|---|
| Shipping Name: | No Information Available | No Information Available | No Information Available | No Information Available | No information available. |
| Hazard Class: | | | | | |
| UN Number: | | | | | |
| Packing Group: | | | | | |

## Section 15 - Regulatory Information

**15.1 EHS Chemical Specific Regulations**

**SARA**

**Section 302 (TPQ):** None of the chemicals in this product have a TPQ.

**Section 313:** No chemicals are reportable under Section 313.

**SARA 311/312 Hazards:** No SARA Hazards

**STATE:**

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

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**New Jersey Right To Know Components**

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**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 16 - Additional Information

**16.1 Hazard Ratings**

**HMIS Rating**

Health hazard: 0
Flammability: 0
Physical Hazard: 0

**NFPA Rating**

Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0