

## 1 Identification

**Product Name:** L-Leucine

**Catalog Number:** L005

**Company:** Caisson Laboratories

**Address:** 836 South 100 East, Smithfield, UT 84335

**Telephone:** 435.755.7615

**Fax:** 435.755.7617

**Emergency Contact:** CHEMTREC 800.424.9300 (703.527.3887)

**Recommended Use:** For research and laboratory use only.

**Restrictions On Use:** This product is intended for research and laboratory use only. This product is not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

## 2 Hazard(s) Identification

### Classification of the Substance or Mixture

**GHS Classification:** Not a hazardous substance or mixture.

### GHS Label elements, including precautionary statements

**Signal Word:** Not Hazardous

### Hazard Statements

Not a hazardous substance or mixture.

### Precautionary Statements

Not a hazardous substance or mixture.

### Pictograms:

## 3 Composition / Information on Ingredients

**Synonyms:** 2-Amino-4-methyl-pentanoic Acid

**Formula:** C<sub>6</sub>H<sub>13</sub>NO<sub>2</sub>

**Molecular Weight (g/mol):** 131.17

**CAS Number:** 61-90-5

**EC Number:** 200-522-0

Component	Concentration (%)	Classification
L-Leucine	98.5 - 101.5	Not a hazardous substance or mixture.

## 4 First-Aid Measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

## Route of Exposure

**If swallowed:** If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.

**In case of skin contact:** Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

**In case of 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. Get medical attention.

**If inhaled:** Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

**Recommendation for immediate medical care and special treatment needed:** No data available

## 5 Fire-Fighting Measures

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment and precautions for fire-fighters:** Wear self-contained breathing apparatus and protective clothing.

**Special hazards arising from the substance or mixture:** Carbon oxides

**Additional Information:** No data available

## 6 Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Avoid dust formation. Avoid breathing vapors, mist or gas. For personal protection see section 8.

**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and material for containment and cleanup:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7 Handling and Storage

**Precautions for safe handling:** Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

**Conditions for safe storage:** Keep in a tightly closed container and store in a cool, dry, and well-ventilated area.

**Recommended storage temperature:** Room Temperature

**Incompatibilities:** Strong oxidizing agents

## 8 Exposure Controls / Personal Protection

**OSHA Permissible Exposure Limits (PELs):** None

**ACGIH Threshold Limit Values (TLVs):** None

**Engineering controls:** Handle in accordance to general industrial hygiene and safety practice.

**Personal Protective Equipment (PPE)**

**Eye/face protection:** Wear chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

**Skin protection:** Wear protective gloves.

**Respiratory protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Body protection:** Wear lab coat, gown, or coveralls to protect from exposure.

## 9 Physical and Chemical Properties

**Appearance:** White Crystalline Powder

**pH:** 5.5 - 7.0 (1%, H<sub>2</sub>O)

**Solubility:** Soluble in water

**Specific Gravity:** 1.293

**Melting Range:** > 300 °C (> 572 °F) - lit.

**Odor:** Odorless

**Odor Threshold:** No data available

**Viscosity:** No data available

**Relative Density:** No data available

**Evaporation Rate:** No data available

**Initial Boiling Point and Boiling Range:** No data available

**Flash Point:** No data available

**Flammability (Solid, gas):** No data available

**Flammability Upper/Lower Limits:** No data available

**Partition Coefficient: n-octanol/water:** log Pow: -1.52

**Vapor Density:** No data available

**Vapor Pressure:** No data available

**Auto-ignition Temperature:** No data available

**Decomposition Temperature:** No data available

## 10 Stability and Reactivity

**Reactivity:** No data available

**Chemical stability:** Stable under normal conditions of use.

**Possibilities of hazardous reactions:** No data available

**Conditions to avoid:** Moisture

**Incompatible materials:** Strong oxidizing agents

**Hazardous decomposition products:** Carbon oxides

## 11 Toxicological Information

**Toxicity:** LD<sub>50</sub> IP - Rat: 5,379 mg/kg

### **Carcinogenicity**

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

**Reproductive toxicity:** No data available

**Symptoms associated with overexposure:** Irritation, itching, gastrointestinal upset, nausea, vomiting, possible mutagenic and reproductive effects, breathing difficulties, body temperature changes

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Target Organs:** None identified

**Medical conditions aggravated by exposure:** None identified

**Routes of entry:** Ingestion, inhalation, skin and eye contact

**NIOSH/RTECS:** OH2850000

## 12 Ecological Information

**Toxicity:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** log Pow: -1.52

**Mobility in soil:** No data available

**Results of PBT and vPvB:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

**Other adverse effects:** No data available

## 13 Disposal Considerations

**Disposal of Product:** Dispose in accordance with all applicable federal, state, and local environmental regulations.

**Disposal of Packaging:** Dispose of as unused product.

## 14 Transport Information

### **DOT (US)**

Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)

UN/NA number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

Reportable Quantity (RQ): N/A

Poison Inhalation Hazard: N/A

**IMDG**

Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)

UN number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

**IATA**

Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)

UN Number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

## 15 Regulatory Information

**TSCA:** Listed

**SARA Title III**

**Section 302 (EHS) Ingredients:** No

**Section 313 Ingredients:** No

**Section 304 (EHS/CERCLA) Ingredients:** No

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

## 16 Other Information

**HMIS Rating**

**Health hazard:** 0

**Chronic health hazard:**

**Flammability:** 0

**Physical hazard:** 0

**NFPA Rating**

**Health hazard:** 0

**Fire hazard:** 0

**Reactivity:** 0

**Special Hazard:**

**Further information:** All chemicals may pose unknown hazards and should be used with caution. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Caisson Laboratories, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.

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