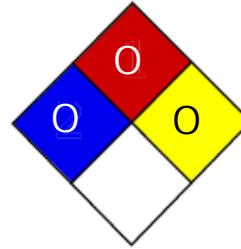




"Chemicals, Reagents & BioAffinity Matrix"



Health	0
Fire	0
Reactivity	0
Personal Protection	

## Material Safety Data Sheet

### L-Threonine

#### 1: Chemical Product and Company Identification

**Product Name:** L-Threonine

**Contact information:**

**Catalog Code:** 42000016-1, 42000016-2

**bioWORLD**  
4150 Tuller Rd  
Suite 228, Dublin, OH 43017, USA

**CAS#:** 72-19-5

For information, call: 614-792-8680  
Fax Number: 614-792-8685  
Order Online: [www.bio-world.com](http://www.bio-world.com)

**RTECS:** XO8590000

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

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

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

**CI#:** Not available.

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

**Synonym:** Threonin; Threonine; L-Threonine; (S)-Threonine

**Chemical Name:** L-Threonine

**Chemical Formula:** C<sub>4</sub>H<sub>9</sub>NO<sub>3</sub>

#### 2: Composition and Information on Ingredients

##### Composition:

###### Name

L-Threonine

###### CAS#

72-19-5

###### % by Weight

-

##### Toxicological Data on Ingredients:

LD<sub>50</sub> (Intraperitoneal, Rat): 3098 mg/kg

#### 3: Hazards Identification

**Potential Acute Health Effects:** Irritating to eyes, respiratory system and skin.

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** Not available.

**MUTAGENIC EFFECTS:** Not available.

**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:** May be combustible at high temperature.

**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 : Government approved respirator.

Hand: Chemical resistant gloves.

Eye: Safety glasses.

**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

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** 119.12 g/mole

**Color:** Not available.

**pH(1% soln/water):** 5.0 - 6.0

**Boiling Point:** Not available.

**Melting Point:** 256 °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. Inhalation. Ingestion

**Toxicity to Animals:**

LD<sub>50</sub> (Intraperitoneal, Rat): 3098 mg/kg

**Chronic Effects on Humans:** Not available.

**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: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**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-Threonine

**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:** 20/09/2008 10:17:48 AM

**Last Updated:** 17/12/2008 10:47:49 AM

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