

Material Safety Data Sheet L-Threonine

Section 1: Chemical Product and Company Identification

Product Name : L-Threonine
Chemical Formula : C₄H₉NO₃
Address : Tradeasia International PTE LTD
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	Percent	RTECS
L-Threonine	72-19-5	≥98,5%	XO8590000

Toxicological Data on Ingredients:

L-Threonine LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Potential Chronic Health Effects: Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available.

Inhalation: Allow the victim to rest in a well-ventilated area. Seek immediate medical attention.

Serious Inhalation: Not available.

Ingestion: Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Section 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.

Products of Combustion: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

Fire Hazards in Presence of Various Substances: Not available.

Explosion Hazards in Presence of Various Substances: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

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.

Section 7: Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible.

Storage:

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

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

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: white to hazel crystals or crystals powder

Odor	: Not available.
Taste	: sweet slightly.
Molecular Weight	: 119.12 g/mole
PH (1% soln/water)	: Not available.
Boiling Point	: Not available.
Critical Temperature	: Not available.
Specific Gravity	: Not available.
Vapor Pressure	: Not applicable.
Vapor Density	: Not available.
Volatility	: Not available.
Odor Threshold	: Not available.
Water/Oil Dist. Coeff	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: See solubility in water.
Solubility	: Easily soluble in cold water.

Section 10: Stability and Reactivity Data

Stability	: Stable if stored in dry conditions in sealed or closed containers.
Instability Temperature	: Not available.
Conditions of Instability	: Not available.
Incompatibility with various substances:	Not available.
Corrosively	: Non-corrosive in presence of glass.
Special Remarks on Reactivity	: Not available.
Special Remarks on corrosively:	Not available.
Polymerization	: No.

Section 11: Toxicological Information

Routes of Entry : Eye contact. Inhalation. Ingestion.

Toxicity to Animals: LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Passes through the placental barrier in human.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Eco-toxicity : Not available.

BOD5 and COD : Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Water treatment methods

Recommendation : Hand over to disposers of hazardous water. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.

Uncleared Packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleaning agent: water, if necessary with cleaning agent.

Section 14: Transport Information

Federal and State Regulations: TSCA 8(b) inventory: L-Threonine

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): R36- Irritating to eyes.

HMIS (U.S.A.): Health Hazard: 2; Fire Hazard: 1; Reactivity: 0; Personal Protection: E

National Fire Protection Association : Health: 2; Flammability: 0; Reactivity: 0;

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 15: Other Regulatory Information

The name of the United Nations (UN) regulations

European road dangerous gauge: not dangerous goods

International maritime dangerous gauge: not dangerous goods

International air freight risk rules: not dangerous goods

Section 16: Other Information

Hazardous Material Information System (HMIS)	Health	2
	Flammability	0
	Physical Hazard	0
	Personal Protection	E