

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: L-Alanine
CAS#: 56-41-7
Synonym: L-2-Aminocaproic acid
Chemical Name: Not available.
Chemical Formula: $\text{CH}_3\text{CH}(\text{NH}_2)\text{COOH}$

Composition and Information on Ingredients

Name	S.K.U	% by Weight
L-Alanine	GCS-9256	100

Hazards Identification

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

Potential Chronic Health Effects: Hazardous in case of eye contact (irritant), of ingestion, of inhalation. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.

First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Not available.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this

material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

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.

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.

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 tightly closed. Keep container in a cool, well-ventilated area.

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.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Physical and Chemical Properties

Physical state and appearance: Solid. (Crystals Solid)

Odor : Odorless.

Taste : Not available.

Molecular Weight : 89.09 g/mole

Color : White.

pH (1% soln/water) : Not available.

Boiling Point : Not available.

Melting Point : Decomposition temperature: 210°C (410°F)

Critical Temperature : Not available.

Specific Gravity : 1.437 (Water = 1)

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 : Soluble in cold water.

Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials.

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

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.

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: Nuisance dust.

Toxicological Data on Ingredients: L-Alanine LD50: Not available. LC50: Not available.

Ecological Information

Ecotoxicity: 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 product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste Disposal:

Transformation Information

Land transport (ADR-RID)

General information: Not regulated.

Sea transport (IMDG) [English only]

General information: Not regulated.

Air transport (ICAO-IATA) [English only]

General information: Not regulated.

Other Regulatory Information

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

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 (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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