



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

Safety Data Sheet (MSDS)

- **Feed Grade L-Valine Amino Acid**(Compliant with GB/T 16483, GHS Rev.9, IMDG, IATA)**Revision Date: 26 FEB 2026**

SECTION 1: Identification

1.1 Product Identifiers

- Name: L-Valine Amino Acid (Feed Grade)
- CAS: 72-18-4
- Synonyms: L-2-Amino-3-methylbutyric acid; (S)-2-Amino-3-methylbutanoic acid
- EINECS: 200-773-6

1.2 Supplier Details

- Company: NEWAY SINOPHC TECH. LIMITED
- Address: RM. 204, BLDG 3, 188 Aona Rd, Shanghai FTZ, China
- Tel: +86-021-50350029 | Fax: +86-021-50350029

1.3 Emergency Contact: +86-021-50350029 (24h)

1.4 Uses: **Exclusive for animal feed additive (essential branched-chain amino acid supplement)**. Not for human food, pharmaceutical or industrial use.

SECTION 2: Hazards Identification

- **GHS Classification:** Respiratory tract irritation (Category 3, dust inhalation)
- **Pictogram:** (Exclamation Mark)
- **Signal Word:** Warning
- **Hazard Statements:** H335 - May cause respiratory irritation
- **Precautionary Statements:** P261 (Avoid breathing dust), P304+P340 (Inhalation: Remove to fresh air), P312 (Call a doctor if unwell)

Summary: Non-hazardous solid feed additive. Mild respiratory irritation may occur only from high-concentration dust. Non-flammable, non-toxic to animals and the environment at recommended dosage.

SECTION 3: Composition/Information on Ingredients

- **Pure Substance:** L-Valine (CAS 72-18-4)
- **Concentration:** ≥99.0% (Feed Grade)
- **Impurities:** None hazardous (compliant with feed hygiene standards)

SECTION 4: First Aid Measures

- **Inhalation:** Immediately move the victim to fresh air and keep warm. Rest in a comfortable position. If coughing or chest tightness persists, seek medical advice.
- **Skin Contact:** Rinse contaminated skin with plenty of running water. No skin irritation is expected; no special treatment required.
- **Eye Contact:** If dust enters eyes, hold eyelids open and rinse continuously with clean water for at least 5 minutes. Do not rub eyes. Consult a doctor if irritation lasts.



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- **Ingestion (Human):** Rinse mouth with water and drink a small amount of warm water. Do not induce vomiting. Seek medical attention only if gastrointestinal discomfort (nausea, abdominal pain) occurs.
- **Antidote:** No specific antidote available. Treat symptomatically.

SECTION 5: Firefighting Measures

- **Extinguishing Media:** Water spray, carbon dioxide (CO₂), dry chemical powder, foam. All common extinguishing agents are suitable.
- **Hazards in Fire:** Decomposes at temperatures above 317°C to produce non-toxic gases (carbon dioxide, nitrogen). No explosion risk, no toxic fumes generated.
- **Firefighter Advice:** Wear standard fire-fighting protective gear (fire-resistant suit, goggles). Cool surrounding containers with water spray to prevent thermal expansion. Avoid inhaling dust generated during combustion.

SECTION 6: Accidental Release Measures

- **Personal Precautions:** For large spills, wear an N95 dust mask, nitrile rubber gloves and safety goggles. Ensure good ventilation in the spill area and evacuate non-essential personnel.
- **Cleanup Methods:**
 - Small Spill: Sweep the spilled powder with a clean brush into a sealed HDPE container for reuse or proper disposal.
 - Large Spill: Collect the powder using a dust-free vacuum cleaner and place it in sealed HDPE drums. Wipe the remaining powder with a damp cloth to prevent dust dispersion.
- **Environmental Precautions:** The product is non-toxic and fully biodegradable. Spilled material can be directly cleaned into soil without causing environmental pollution.

SECTION 7: Handling and Storage

- **Handling Precautions:** Operate in a well-ventilated area with local dust extraction equipment for bulk handling. Avoid generating dust during weighing and mixing. Wash hands thoroughly with soap and water after handling.
- **Storage Conditions:**
 - Temperature: ≤25°C; Relative Humidity: ≤60%
 - Package: Keep tightly sealed in original moisture-proof paper drums with double PE inner liners.
 - Shelf Life: **36 months (unopened, under specified conditions)**
 - Incompatibilities: Strong oxidizing agents (at temperatures above 300°C)
 - Segregation: Store separately from strong oxidizers and non-feed grade chemicals; mark "FEED GRADE" clearly on the storage area.

SECTION 8: Exposure Controls/Personal Protection

- **Occupational Exposure Limit (OEL):** TWA 10 mg/m³ (ACGIH, for amino acid dust)
- **Engineering Controls:** Install local exhaust ventilation systems in bulk weighing and mixing areas to control dust concentration below the limit value.
- **Personal Protective Equipment (PPE):**

- Respiratory Protection: N95 dust mask (required for bulk handling only; not needed for small-batch operation)
- Eye Protection: Chemical-resistant safety goggles (required for bulk handling only)
- Skin Protection: Nitrile rubber gloves (optional for routine handling)

SECTION 9: Physical and Chemical Properties

- **Physical State:** White crystalline powder | **Odor:** Odorless
- **Melting Point:** 315-317°C (decomposes) | **Boiling Point:** N/A (decomposes before boiling)
- **Solubility:** Soluble in water (8.5 g/100 mL at 25°C); slightly soluble in ethanol; insoluble in ether
- **Specific Rotation $[\alpha]_D^{25}$:** +26.0° ~ +30.0° | **Bulk Density:** 1.23-1.26 g/cm³
- **Flash Point:** Not applicable (non-combustible solid) | **Vapor Pressure:** <0.0001 kPa (25°C)
- **pH Value:** 5.5-6.5 (2% aqueous solution, 25°C)

SECTION 10: Stability and Reactivity

- **Stability:** Chemically stable under normal feed production, storage and transportation conditions. No degradation occurs at pelleting temperatures (<85°C).
- **Hazardous Reactions:** No hazardous reactions occur under normal use conditions. Reacts with strong oxidizing agents only at temperatures above 300°C, producing non-toxic gases.
- **Hazardous Polymerization:** Will not occur under any conditions.
- **Decomposition Products:** Carbon dioxide (CO₂), nitrogen (N₂) (high-temperature decomposition).

SECTION 11: Toxicological Information

- **Acute Toxicity:** Oral (Rat) LD₅₀ >15,000 mg/kg (Non-toxic); Dermal (Rabbit) LD₅₀ >20,000 mg/kg (Non-toxic)
- **Skin Irritation:** Rabbit closed patch test shows no skin irritation (Category 0)
- **Eye Irritation:** Rabbit eye test shows no eye irritation (Category 0); dust may cause temporary physical discomfort
- **Carcinogenicity:** IARC Classification - Group 3 (not classifiable as to carcinogenicity to humans)
- **Animal Safety:** As an essential branched-chain amino acid, it is safe for long-term consumption by livestock and poultry at recommended feed inclusion levels, and is crucial for animal growth and development.

SECTION 12: Ecological Information

- **Aquatic Toxicity:** LC₅₀ (Zebrafish, 96h) >10,000 mg/L; EC₅₀ (Daphnia, 48h) >10,000 mg/L (non-toxic to aquatic organisms)
- **Biodegradability:** Fully biodegradable (BOD₅ /COD = 0.88), degraded by soil microorganisms within 2-3 days
- **Bioaccumulation Potential:** None (log P = -2.65, highly water-soluble), no biomagnification in the food chain
- **Environmental Impact:** Animal manure containing L-valine can be used as organic fertilizer to promote plant growth without causing soil or water pollution.



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SECTION 13: Disposal Considerations

- **Product Waste:** Expired or contaminated L-valine is non-hazardous waste. It can be mixed into low-value feed (if not severely contaminated) or disposed of as general solid waste in accordance with local regulations.
- **Packaging Waste:** Rinse the inner lining of the packaging with water, and the rinsing water can be discharged normally. The paper drum and HDPE packaging can be recycled or disposed of as non-hazardous solid waste.
- **Disposal Compliance:** Comply with the "China General Solid Waste Pollution Control Law" and local feed waste disposal regulations.

SECTION 14: Transport Information

- **UN Number:** None (Non-hazardous goods)
- **UN Proper Shipping Name:** L-Valine (Feed Additive), Not Dangerous Goods
- **Hazard Class:** None | **Packaging Group:** None | **Environmental Hazard:** No
- **Transport Precautions:** Transport in covered, dry ordinary cargo vehicles. Prevent moisture absorption, caking and package damage during transportation. Avoid direct sunlight, high temperature (>30°C) and heavy rain. Do not transport in bulk with strong oxidizing agents.

SECTION 15: Regulatory Information

- **China:** Compliant with GB 13078.1-2017 (Feed Hygiene Standard), NY/T 391-2021 (Feed Additive Standards), and included in the "Catalogue of Feed Additives"
- **EU:** Compliant with EC 1831/2003 (Feed Additive Regulation), REACH registered (not in SVHC Candidate List)
- **US:** TSCA listed, compliant with FDA/CVM (Center for Veterinary Medicine) feed additive regulations
- **International:** Meets the feed additive standards of FAO/WHO and Codex Alimentarius Commission

SECTION 16: Other Information

- **Disclaimer:** This MSDS is exclusively for feed grade L-valine amino acid. The supplier shall not be liable for any losses caused by the misuse of the product for non-feed purposes (such as human food, pharmaceuticals, etc.).
- **Revision Date:** 26 FEB 2026