



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)

- DL-Methionine

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards) **Product**

Name: DL-Methionine **Revision Date:** 24 FEB 2026

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifiers

- Product Name: DL-Methionine
- Synonyms: DL-2-Amino-4-(methylthio)butyric acid; DL-Met
- Product Number: DLM-20260224
- Brand: SIGALD
- CAS-No.: 59-51-8
- EINECS Number: 200-432-1
- Molecular Formula: $C_5H_{11}NO_2S$
- Molecular Weight: 149.21 g/mol

1.2 Details of the Supplier

- Company: NEWAY SINOPHC TECH. LIMITED
- Address: RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE
- Telephone: +86-021-50350029
- Fax: +86-021-50350029

1.3 Emergency Telephone

- Emergency Phone #: +86-021-50350029

1.4 Uses

- **Identified Uses:** Essential amino acid supplement for animal feed; food additive (nutritional fortifier); pharmaceutical intermediate; dietary supplement raw material.
- **Uses Advised Against:** Industrial uses not related to nutrition or pharmaceuticals.

SECTION 2: Hazards Identification

2.1 GHS Classification

- **Not Classified** as hazardous according to GHS criteria.

2.2 GHS Label Elements

- **Pictograms:** None
- **Signal Word:** None
- **Hazard Statements:** None
- **Precautionary Statements:** None (standard handling precautions apply)

2.3 Physical and Chemical Hazards

Non-flammable, non-explosive, non-corrosive. No physical or chemical hazards under normal conditions.

2.4 Health Hazards

- **Acute:** Generally regarded as safe (GRAS). May cause mild gastrointestinal upset if consumed in extremely large quantities. Dust may cause mild respiratory or eye irritation.
- **Chronic:** No known chronic health hazards with normal use.

2.5 Environmental Hazards

- Not hazardous to the environment. Readily biodegradable and a nutrient for aquatic microorganisms.

SECTION 3: Composition/Information on Ingredients

- **Substance:** Pure chemical compound.
- **Non-Hazardous Ingredient:**

Ingredient	CAS No.	Concentration (w/w)	GHS Classification
------------	---------	---------------------	--------------------



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>

Ingredient CAS No. Concentration (w/w) GHS Classification

DL-Methionine 59-51-8 ≥ 99.0% Non-hazardous

SECTION 4: First Aid Measures

- **Inhalation:** Remove to fresh air. If coughing persists, seek medical attention.
- **Skin Contact:** No adverse effects expected. Wipe off excess powder and wash with soap and water.
- **Eye Contact:** Rinse gently with plenty of running water for 5-10 minutes if powder enters eyes. Consult a physician if irritation persists.
- **Ingestion:** Generally safe for consumption. If large amounts are ingested and cause discomfort, drink water and consult a physician. Do not induce vomiting.

SECTION 5: Firefighting Measures

- **Suitable Media:** Water spray, dry chemical powder, carbon dioxide (CO₂), foam.
- **Unsuitable Media:** None.
- **Special Hazards:** Non-flammable. Combustion at very high temperatures may produce oxides of carbon, nitrogen, and sulfur (sulfur dioxide).
- **Advice:** Wear self-contained breathing apparatus (SCBA) if smoke is heavy. Cool containers with water spray.

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Wear dust mask and gloves for large spills to prevent dust inhalation.
- **Environmental Precautions:** No restrictions. Material is biodegradable and safe for the environment.
- **Clean-up:** Small spills: Sweep or vacuum into a sealed container for reuse. Large spills: Dampen to prevent dust dispersion, then sweep into sealed drums.

SECTION 7: Handling and Storage

- **Handling:** Use in a well-ventilated area. Avoid generating excessive dust. Wash hands thoroughly after handling.
- **Storage:** Store in a cool, dry place (5-30°C) in a tightly sealed container. Protect from moisture and direct sunlight.
- **Incompatibilities:** Strong oxidizing agents, strong acids (at high temperatures).
- **Shelf Life:** 36 months (unopened, under specified conditions).

SECTION 8: Exposure Controls/Personal Protection

- **Exposure Limits:** No specific occupational exposure limits.
- **Engineering Controls:** General ventilation is sufficient. Local exhaust ventilation is recommended for bulk handling to control dust.
- **Personal Protective Equipment (PPE):**
 - **Eye/Face:** Safety glasses with side shields.
 - **Skin:** Nitrile or latex gloves.
 - **Respiratory:** Disposable dust mask for bulk handling or dusty conditions.

SECTION 9: Physical and Chemical Properties

- **Physical State:** Crystalline powder
- **Color:** White to off-white
- **Odor:** Faint, characteristic sulfurous odor
- **pH Value:** 5.6 - 6.1 (5% aqueous solution)
- **Melting Point:** 280°C (decomposition)
- **Boiling Point:** Not applicable (decomposes)
- **Flash Point:** > 300°C (Non-flammable)
- **Relative Density:** 1.340 g/cm³ (20°C)



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>

- **Solubility:** Soluble in water (≈ 50 g/L at 25°C); slightly soluble in ethanol; insoluble in ether.
- **Particle Size:** Typically 20-80 mesh (customizable)
- **Refractive Index:** Not applicable (solid)

SECTION 10: Stability and Reactivity

10.1 Chemical Stability

Stable under normal storage and handling conditions. Stable to heat processing typical in food and feed manufacturing.

10.2 Possibility of Hazardous Reactions

No hazardous polymerization or decomposition expected under normal use.

10.3 Conditions to Avoid

Prolonged exposure to high temperatures ($> 280^{\circ}\text{C}$) and strong oxidizing agents.

10.4 Hazardous Decomposition Products

Sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen oxides (NO_x) if burned at very high temperatures.

SECTION 11: Toxicological Information

- **Acute Toxicity:** LD_{50} (Oral, Rat) $> 5,000$ mg/kg; Practically non-toxic.
- **Skin Irritation:** Non-irritating to skin.
- **Eye Irritation:** Slightly irritating if powder remains in the eye.
- **Carcinogenicity:** IARC Group 3 (Not classifiable as to its carcinogenicity to humans).
- **Reproductive Toxicity:** No adverse effects observed. It is an essential nutrient for reproduction.

SECTION 12: Ecological Information

- **Toxicity:** Non-toxic to aquatic organisms. Acts as a nutrient for bacteria and algae.
- **Persistence and Degradability:** Readily biodegradable ($> 90\%$ in 28 days).
- **Bioaccumulative Potential:** None (water-soluble amino acid).

SECTION 13: Disposal Considerations

- **Product Waste:** Dispose of as non-hazardous waste. Can be discharged into sewage systems (biodegradable) or sent to landfill.
- **Packaging Waste:** Rinse empty packaging and dispose of as recyclable waste (paper, plastic) or non-hazardous solid waste.

SECTION 14: Transport Information

- **UN Number:** Not applicable (Non-dangerous goods)
- **UN Proper Shipping Name:** Not applicable
- **Class:** Not applicable
- **Packing Group:** Not applicable
- **Marine Pollutant:** No
- **Special Precautions:** Transport as non-dangerous cargo. Protect from moisture and rain during transport.

SECTION 15: Regulatory Information

- **EU:** REACH Registered. Compliant with EC 1333/2008 (Food Additives) and EC 1831/2003 (Feed Additives).
- **US:** FDA GRAS. Listed in TSCA Inventory. Approved for use in food (21 CFR) and feed.
- **China:** Compliant with GB 2760-2021 (Food Additive), GB/T 17810-2008 (Feed Grade DL-Methionine).

SECTION 16: Other Information

- **Further Information:** DL-Methionine is an essential amino acid required for protein synthesis in humans and animals.
- **Revision Note:** First issue.



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>

- **Disclaimer:** This MSDS is based on current scientific data. The supplier is not liable for damage caused by improper use.



纳维盈医化科技
NEWAY SINOPHC TECH