

Safety Data Sheet

Section 1: Identification

Product Name: DL-Methionine.

Product Use: Animal Feed

Company Identification:

Origination, LLC
1802 Wooddale Drive, Suite 200
Woodbury, MN 55125

For information, call: 1-800-625-6079

Emergency Number: 1-800-625-6079

For CHEMTREC assistance, call: 1-800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2: Hazard(s) Identification

Emergency Overview

WHMIS Classification: No WHMIS Controlled. Not a dangerous substance according to GHS.

Potential Health Effects

Inhalations: May be harmful if inhaled. May cause respiratory tract irritation.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eye: May cause eye irritation.

Ingestion: May be harmful if swallowed.

Section 3: Composition / Information on Ingredients

Composition:

Name: DL-Methionine

CAS#: 59-51-8.

RTECS: PD0456000.

Synonym: DL-2-Amino-4-(methylthio) butyric acid

Chemical Formula: C₅H₁₁NO₂S

Toxicological Data on Ingredients: DL-methionine LD50: Not available. LC50: 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: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation: In case product dust is released: Possible discomfort: cough, sneezing. 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.

Notes to physician: After absorbing large amounts of substance. Possible discomfort: nausea, vomiting. Treatment of symptoms, administration of activated charcoal, acceleration of the gastro-intestinal tract.

Section 5: Fire Fighting Measures

Suitable extinguishing media: Water, foam, mist.

Extinguishing media which must not be used for safety reasons carbon dioxide(CO2)

Specific hazards during firefighting: May be released in case of fire: hydrocyanic acid, flammable smouldering gases, NOX. Sulphur oxides, carbon monoxide, and carbon dioxide.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

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.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Further information: Contaminated fire-extinguishing water must be disposed of in accordance with the regulations issued by the appropriate local authorities. Fire residues should be disposed of in accordance with the regulations.

Section 6: Accidental Release Measures

Personal precautions: Wear personal protective equipment. Keep unauthorized persons away.

Environmental precautions: Do not allow the product into the following compartments: groundwater Methods for cleaning up Absorb mechanically avoiding production dust.

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. 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. Avoid contact with skin and eyes.

Safe handling advice: Handle in accordance with good industrial hygiene and safety practices. Advice on protection against fire and explosion.

Combustible: Keep away from sources of ignition-No smoking.

Avoid dust formation: Must be rendered inert for grinding.

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.

Hand protection: The glove material has to be impermeable and resistant to the product/the substance/the preparation.

Eye protection: Safety glasses with side-shields. If dust occurs: basket-shaped glasses.

Skin and body protection: No special protective equipment required.



Hygiene measures: Wash face and hands before break and end of work. Cleanse and apply cream to skin after work.

Protective measures: Handle in accordance with good industrial hygiene and safety practices. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used 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: Solid. (Solid powder.)

Colour: White

Odour: Slight

Taste: Not available.

Molecular Weight: 149.21 g/mole

pH: 5-6 (10g/l) (20°C) water.

Boiling Point: Not available.

Melting Point: Decomposes. (281°C or 537.8°F).

Critical Temperature: Not available.

Specific Gravity: 1.34 (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, methanol.

Solubility: Soluble in cold water, methanol.

Section 10: Stability and Reactivity

Hazardous decomposition products: Sulphides, flammable smoldering gases.

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: No conditions to avoid. Light. Keep away from heat, flame, sparks and other ignition sources..

Electrostatic charges

Incompatible materials: Oxidizing agents.

Hazardous decomposition products: Carbon monoxide (CO) and carbon dioxide(CO₂) Water.

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 skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

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

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

Primary irritant effect on the skin: May cause skin irritation.

Primary irritant effect on the eye: May cause irritation to eyes.

Primary irritant effect on ingestion: May cause gastrointestinal tract irritations.

Primary irritant effect on inhalation: No specific health warning noted.

Section 12: 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 products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations (non-mandatory)

Waste Disposal: Disposal according to local authority regulations. Rinsed packing material to local recycling facilities.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: No hazards identification. The substance is not subject to IMO IMDG Code.

Special Provisions for Transport: Not applicable. Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information

On the basis of our data the product is not a hazardous substance as defined by the Chemicals Act or Substance Ordinance in the currently valid versions.

Inspection: Commodity Inspection Standard: GB/T 17810-2009.

Section 16: Additional Information

Prepared by: Origination, LLC

Prepared: November 12, 2020

Disclaimer:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Origination be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Origination has been advised of the possibility of such damages.