

# DL-methionine - MSDS

## MATERIAL SAFETY DATA SHEET

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### SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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**Product Identifier:**

Product name: DL-methionine  
 Product Number: FAP-3  
 Brand: Pangoo  
 CAS-No.: 68308-36-1

**Name of supplier, address and emergency telephone number:**

Company : Pangoo Biotech Hebei Co., Ltd.  
 Add: Cangzhou, Hebei, China  
 Emergency telephone number: +86-317-8585021

**Product use:** As feed additive for animals

**Date of MSDS preparation:** 11/21/2018

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### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

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**Composition:**

Name	CAS #	% by Weight
{DL-}methionine	59-51-8	100

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

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### SECTION 3 HAZARDS IDENTIFICATION

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**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: N/A  
 MUTAGENIC EFFECTS: N/A  
 TERATOGENIC EFFECTS: N/A  
 DEVELOPMENTAL TOXICITY: N/A

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### SECTION 4 FIRST AID MEASURES

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**Inhalation:**

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

**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.
<b>Serious Skin Contact:</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
<b>Ingestion:</b>	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.

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 SECTION 5 FIRE FIGHTING MEASURES
 

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**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** N/A

**Flash Points:** N/A

**Flammable Limits:** N/A

**Products of Combustion:**

These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**Fire Hazards in Presence of Various Substances:** N/A

**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:** N/A

**Special Remarks on Explosion Hazards:** N/A

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 SECTION 6 ACCIDENTAL RELEASE MEASURES
 

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**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.

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 SECTION 7 HANDLING AND STORAGE
 

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**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.

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 SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION
 

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**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:** N/A

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SECTION 9                      PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance:</b>	Solid. (Solid powder.)
<b>Odor:</b>	N/A
<b>Taste:</b>	N/A
<b>Molecular Weight:</b>	149.21 g/mole
<b>Color:</b>	N/A
<b>pH (1% soln/water):</b>	N/A
<b>Boiling Point:</b>	N/A
<b>Melting Point:</b>	Decomposes. (281°C or 537.8°F)
<b>Critical Temperature:</b>	N/A
<b>Specific Gravity:</b>	1.34 (Water = 1)
<b>Vapor Pressure:</b>	N/A
<b>Vapor Density:</b>	N/A
<b>Volatility:</b>	N/A
<b>Odor Threshold:</b>	N/A
<b>Water/Oil Dist. Coeff.:</b>	N/A
<b>Ionicity (in Water):</b>	N/A
<b>Dispersion Properties:</b>	See solubility in water, methanol.
<b>Solubility:</b>	Soluble in cold water, methanol.

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SECTION 10                    STABILITY AND REACTIVITY

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<b>Stability:</b>	The product is stable.
<b>Instability Temperature:</b>	N/A
<b>Conditions of Instability:</b>	N/A
<b>Incompatibility with various substances:</b>	N/A
<b>Corrosivity:</b>	Non-corrosive in presence of glass.
<b>Special Remarks on Reactivity:</b>	N/A
<b>Special Remarks on Corrosivity:</b>	N/A
<b>Polymerization:</b>	No.

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SECTION 11                    TOXICOLOGICAL INFORMATION

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**Routes of Entry:** Eye contact. Inhalation. Ingestion.  
**Toxicity to Animals:** LD50: Not available. LC50: Not available.  
**Chronic Effects on Humans:** N/A  
**Other Toxic Effects on Humans:** Hazardous in case of skin contact (irritant), of ingestion, of inhalation

<b>Other Toxic Effects on Humans:</b>	Hazardous in case of skin contact (irritant), or ingestion, or immersion.
<b>Chronic:</b>	Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).
<b>Special Remarks on Toxicity to Animals:</b>	N/A
<b>Special Remarks on Chronic Effects on Humans:</b>	Passes through the placental barrier in animal.
<b>Special Remarks on other Toxic Effects on Humans:</b>	N/A

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 SECTION 12 ECOLOGICAL INFORMATION
 

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<b>Ecotoxicity:</b>	N/A
<b>BOD5 and COD:</b>	N/A
<b>Persistence and degradability:</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation:</b>	The products of degradation are more toxic.
<b>Special Remarks on the Products of Biodegradation:</b>	N/A

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 SECTION 13 DISPOSAL CONSIDERATIONS
 

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**Waste Disposal:**


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 SECTION 14 TRANSPORT INFORMATION
 

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<b>DOT (US)</b>	Not a DOT controlled material (United States).
<b>IMDG</b>	N/A
<b>IATA</b>	N/A

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 SECTION 15 REGULATORY INFORMATION
 

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<b>Federal and State Regulations:</b>	TSCA 8(b) inventory: DL-methionine
<b>Other Regulations:</b>	N/A
<b>Other Classifications:</b>	
<b>WHMIS (Canada):</b>	Not controlled under WHMIS (Canada).
<b>DSCL (EEC):</b>	R36- Irritating to eyes.
<b>HMIS (U.S.A.):</b>	Health Hazard: 2 Fire Hazard: 1 Reactivity: 0 Personal Protection: E
<b>National Fire Protection Association (U.S.A.):</b>	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. Splash goggles.

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 SECTION 16 OTHER INFORMATION
 

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"IMO" : not dangerous for sea transport

Disclaimer

*Additional references can be taken from the label or the product description. The information given here is correct to the best of our knowledge at the time of writing this sheet. No responsibility can be taken for improper use or handling of the product.*