

Choline Chloride - MSDS

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier:

Product name: Choline chloride
 Product Number: FPV-6
 Brand: Pangoo
 CAS-No.: 67-48-1

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

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: 2-Hydroxy-N,N,N-trimethylethanaminium chloride

Chemical Formula: C₅H₁₄ClNO

Composition:

Name	CAS #	% by Weight
Choline chloride	67-48-1	100

Toxicological Data on Ingredients: Choline chloride: ORAL (LD50): Acute: 3400 mg/kg [Rat].

SECTION 3 HAZARDS IDENTIFICATION

Classification of substance or mixture

Not a hazardous substance or mixture.

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not a hazardous substance or mixture.

Label elements and precautionary statements

Signal word: N/A
 Hazard statement(s): N/A
 Precautionary statement(s): N/A

Hazards not otherwise classified (HNOC) or not covered by GHS: N/A

NFPA Rating

Health hazard: 0
 Fire hazard: 0
 Reactivity hazard: 0

HMIS Rating

Health hazard: 1
 Chronic health hazard : 0
 Reactivity hazard : 0
 Flammability: 0
 Physical hazard:0

SECTION 4

FIRST AID MEASURES

Inhalation:	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Serious Inhalation:	N/A
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.
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:	N/A

SECTION 5

FIRE FIGHTING MEASURES

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 ₂), nitrogen oxides (NO, NO ₂ ...), halogenated compounds.
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

SECTION 6

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.

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

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 ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

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:

Safety glasses. 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

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance:	Solid.
Odor:	N/A
Taste:	N/A
Molecular Weight:	139.62 g/mole
Color:	N/A
pH (1% soln/water):	5 [Acidic.]
Boiling Point:	N/A
Melting Point:	N/A
Critical Temperature:	N/A
Specific Gravity:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A
Volatility:	N/A
Odor Threshold:	N/A
Water/Oil Dist. Coeff.:	N/A
Ionicity (in Water):	N/A
Dispersion Properties:	See solubility in water.
Solubility:	Soluble in cold water.

SECTION 10

STABILITY AND REACTIVITY

Stability:	The product is stable.
Instability Temperature:	N/A
Conditions of Instability:	N/A
Incompatibility with various substances:	N/A
Corrosivity:	Non-corrosive in presence of glass.

Special Remarks on Reactivity:	N/A
Special Remarks on Corrosivity:	N/A
Polymerization:	No.

 SECTION 11 TOXICOLOGICAL INFORMATION

Toxicity to Animals:	Acute oral toxicity (LD50): 3400 mg/kg [Rat].
Routes of Entry:	Eye contact. Inhalation. Ingestion.
Other Toxic Effects on Humans:	Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator).
Chronic Effects on Humans:	The substance is toxic to lungs, mucous membranes.
Special Remarks on Toxicity to Animals:	N/A
Special Remarks on Chronic Effects on Humans:	N/A
Other Toxic Effects on Humans:	N/A

 SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:	N/A
BOD5 and COD:	N/A
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:	N/A

 SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal:
 Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.

Product Containers:
 Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

 SECTION 14 TRANSPORT INFORMATION

DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

 SECTION 15 REGULATORY INFORMATION

Federal and State Regulations:	TSCA 8(b) inventory: L-Lysine monohydrochloride
Other Regulations:	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
Other Classifications:	
WHMIS (Canada):	CLASS D-2A: Material causing other toxic effects (VERY TOXIC).
DSCL (EEC):	R36/38- Irritating to eyes and skin.

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. Safety glasses.

SECTION 16 OTHER INFORMATION

"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.