

MATERIAL SAFETY DATA SHEET (MSDS)

1. Identification

1.1. GHS Product identifier **Product name** L-a-glycerophosphoryl choline **1.2.** Other means of identification **Product number** Other names Alpha-GPC; Choline alfoscerate 1.3. Recommended use of the chemical and restrictions on use **Identified uses** Scientific research uses. Uses advised against no data available **1.4.** Supplier's details SUZHOU MYLAND PHARM & NUTRITION INC. Company No.208 Chaoqing Office Tower, 262 Dongping Road, Address Suzhou Industry Park, Suzhou, Jiangsu, China. 215123 86-512-66706057 Telephone 86-512-66703687-8009 Fax

2. Hazard identification

- **2.1. Classification of the substance or mixture** Not classified.
- 2.2. GHS label elements, including precautionary statements Pictogram(s) No symbol. Signal word No signal word Hazard statement(s) none **Precautionary statement(s)** Prevention none Response none Storage none Storage none
- **2.3.** Other hazards which do not result in classification no data available

3. Composition/information on ingredients

3.1. Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
L-a-glycerophosphoryl choline	Alpha-GPC; Choline alfoscerate	28319-77-9	248-962-2	100%

4. First-aid measures

4.1. Description of necessary first-aid measures

General advice

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

- **4.2.** Most important symptoms/effects, acute and delayed no data available
- 4.3. Indication of immediate medical attention and special treatment needed, if necessary

no data available

5. Fire-fighting measures

- **5.1. Extinguishing media Suitable extinguishing media** Use dry chemical, carbon dioxide or alcohol-resistant foam.
- **5.2.** Specific hazards arising from the chemical no data available
- **5.3.** Special protective actions for fire-fighters Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable

gloves. Ensure adequate ventilation.Remove all sources of ignition. Evacuate personnel to safe areas.Keep people away from and upwind of spill/leak.

- **6.2. Environmental precautions** Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.
- 6.3. Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

7. Handling and storage

7.1. Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

7.2. Conditions for safe storage, including any incompatibilities Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

8. Exposure controls/personal protection

8.1. Control parameters Occupational Exposure limit values no data available

8.2. Appropriate engineering controls Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

Thermal hazards

no data available

9. Physical and chemical properties

Physical state Colour Odour Melting point/ freezing point Boiling point or initial boiling point and boiling	Solid no data available no data available no data available no data available
range Flammability Lower and upper explosion	no data available no data available
limit / flammability limit Flash point Auto-ignition temperature	11 °C no data available
Decomposition temperature pH Kinematic viscosity	
Solubility Partition coefficient n-	no data available no data available
octanol/water Vapour pressure Density and/or relative	no data available no data available
density Relative vapour density Particle characteristics	no data available no data available

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10. Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability no data available

- **10.3. Possibility of hazardous reactions** no data available
- **10.4. Conditions to avoid** no data available
- **10.5. Incompatible materials**

no data available

10.6. Hazardous decomposition products no data available

11. Toxicological information

Acute toxicity

• Oral: no data available

• Inhalation: no data available • Dermal: no data available Skin corrosion/irritation no data available Serious eye damage/irritation no data available **Respiratory or skin sensitization** no data available Germ cell mutagenicity no data available Carcinogenicity no data available **Reproductive toxicity** no data available **STOT-single exposure** no data available **STOT-repeated exposure** no data available Aspiration hazard no data available

12. Ecological information

12.1. Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

12.2. Persistence and degradability no data available

12.3. Bioaccumulative potential no data available

12.4. Mobility in soil

no data available

12.5. Other adverse effects no data available

13. Disposal considerations

13.1. Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14. Transport information

14.1. UN Number

ADR/RID: Not dangerous	IMDG: Not dangerous	IATA: Not dangerous			
goods. (For reference only,	goods. (For reference only,	goods. (For reference only,			
please check.)	please check.)	please check.)			
14.2. UN Proper Shipping Name					
ADR/RID: Not dangerous	IMDG: Not dangerous	IATA: Not dangerous			
goods. (For reference only,	goods. (For reference only,	goods. (For reference only,			
please check.)	please check.)	please check.)			
14.3. Transport hazard class	(es)				
ADR/RID: Not dangerous	IMDG: Not dangerous	IATA: Not dangerous			
goods. (For reference only,	-	goods. (For reference only,			
please check.)	please check.)	please check.)			
14.4. Packing group, if applicable					
ADR/RID: Not dangerous	IMDG: Not dangerous	IATA: Not dangerous			
goods. (For reference only,	C .	goods. (For reference only,			
please check.)	please check.)	please check.)			
14.5. Environmental hazards					
ADR/RID: No	IMDG: No	IATA: No			
14.6. Special precautions for	user				
no data available					
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and					
the IBC Code					
no data available					

15. Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
L-a-glycerophosphoryl choline	Alpha-GPC; Choline alfoscerate	28319-77-9	248-962-2
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Not Listed.

China Catalog of Hazardous chemicals 2015	Not Listed.
New Zealand Inventory of Chemicals (NZIoC)	Not Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Not Listed.
Vietnam National Chemical Inventory	Not Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)	Not Listed.
Korea Existing Chemicals List (KECL)	Listed.

16. Other information

Further information

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