# MATERIAL SAFETY DATA SHEET (MSDS)

# **Identification**

1.1. Product identifier

**Product name** Citicoline

1.2. Other means of identification

Other names Cytidine 5'-diphosphate choline; Cytidoline

Cytidine choline diphosphate

1.3. Recommended use of the chemical and restrictions on use

**Identified uses** Industrial and scientific research uses.

Uses advised against no data available

1.4. Supplier's details

**Company** Suzhou MyLand Pharm & Nutrition Inc.

Address No.208 Chaoqing Office Tower, 262 Dongping

Road, Suzhou Industry Park, Suzhou, Jiangsu, China.

**Telephone** 86-512-66706057

#### 2. **Hazard identification**

#### 2.1. Classification of the substance or mixture

Not classified.

#### 2.2. Label elements, including precautionary statements

Pictogram(s) No symbol. No signal word 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
Citicoline	Citicoline	987-78-0	213-580-7	100%

## 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.

# 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 stateWhite powderColourno data availableOdourno data availableMelting point/ freezing pointno data availableBoiling point or initialno data available

boiling point and boiling

range

Flammability no data available Lower and upper explosion no data available

limit / flammability limit

Flash point no data available
Auto-ignition temperature
Decomposition temperature
pH no data available

octanol/water

Vapour pressure no data available Density and/or relative no data available

density

**Relative vapour density** no data available **Particle characteristics** no data available

# 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, please check.)

IMDG: Not dangerous IATA: Not dangerous goods. (For reference only, goods. (For reference only, please check.)

## 14.2. UN Proper Shipping Name

ADR/RID: Not dangerous IMDG: Not dangerous IATA: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous IATA: Not dangerous goods. (For reference only, please check.)

#### 14.3. Transport hazard class(es)

ADR/RID: Not dangerous IMDG: Not dangerous IATA: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous IATA: Not dangerous goods. (For reference only, please check.)

#### 14.4. Packing group, if applicable

ADR/RID: Not dangerous IMDG: Not dangerous IATA: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous IATA: Not dangerous goods. (For reference only, goods. (For reference only, 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	CAS	EC
	names	number	number
	and		
	synonyms		
Citicoline	Citicoline	987-78-	213-
		0	580-7

European Inventory of Existing Commercial Chemical	
Substances (EINECS)	
EC Inventory	Listed.
United States Toxic Substances Control Act (TSCA)	Not
Inventory	Listed.
China Catalog of Hazardous chemicals 2015	Not
	Listed.
New Zealand Inventory of Chemicals (NZIoC)	
	Listed.
Philippines Inventory of Chemicals and Chemical	Not
Substances (PICCS)	Listed.
Vietnam National Chemical Inventory	Not
	Listed.
Chinese Chemical Inventory of Existing Chemical	Not
Substances (China IECSC)	Listed.
Korea Existing Chemicals List (KECL)	Listed.

# 16. Other information

#### **Further information**

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