# Citicoline



# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

## Trade name

Citicoline

## CAS number

987-78-0

# EC number

213-580-7

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

## Relevant identified uses

Research and development.

#### Not suitable for use in

Not suitable for human consumption or veterinary purposes.

# 1.3. Details of the supplier of the safety data sheet

#### Supplier

Molekula Group

Street address

Molekula Ltd, Lingfield Way, Darlington,

**DL1 4XX Darlington** 

United Kingdom

#### Telephone

+44 (0) 3302 000 333

Email

info@molekula.com

Web site

www.molekula.com

## Contact person

Kevin Banks

# Email address

+44 (0) 7769276927

# 1.4. Emergency telephone number

## Poison center/Additional emergency number

0344 892 0111 - National Poisons Information Service (Newcastle Centre)

#### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

The product is not classified as hazardous according to Regulation (EC) No 1272/2008.

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# 2.2. Label elements

The product does not require labelling in accordance with CLP Regulation (EC) No 1272/2008.

## 2.3. Other hazards

No data available

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
Citicoline	987-78-0 213-580-7 -	100%	-	-	-

#### Molecular weight

488.32

#### **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

## **Inhalation**

Move to fresh air if inhaled.

Get medical attention if any discomfort continues.

# Skin contact

Rinse skin with water.

If skin irritation or rash occurs: Get medical advice/attention.

#### Eye contact

Remove contact lenses if present. Rinse eyes with water.

If eye irritation persists: Get medical advice/attention.

# **Ingestion**

Rinse mouth.

Get medical advice/attention if you feel unwell.

## **Information for doctors**

No data available.

# 4.2. Most important symptoms and effects, both acute and delayed

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

May cause respiratory irritation.

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# Skin contact

Prolonged contact may cause dryness of the skin.

#### Eye contact

May be slightly irritating to the eyes.

#### <u>Ingestion</u>

May cause discomfort if swallowed.

# 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No special treatment requirement.

# **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

## Suitable extinguishing media

In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

# Unsuitable extinguishing media

No specific fire fighting procedure given.

# 5.2. Special hazards arising from the substance or mixture

Specific hazards: None.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Carbon monoxide (CO). Carbon dioxide (CO2).

# 5.3. Advice for firefighters

## Special protective equipment for fire-fighters

Evacuate area. Avoid breathing gas, fume, vapours or spray. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

## **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. Avoid contact with skin and eyes. Wear protective gloves, eye and face protection. Remove sources of ignition. Evacuate area. For personal protection, see section 8.

#### 6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

## 6.3. Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

### 6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

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# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

# **Preventive handling precautions**

For precautions see section 2.2.

# 7.2. Conditions for safe storage, including any incompatibilities

Store in a dry place. Store in a closed container. Recommended storage temperature: 2 to 8°C (35.6 to 46.4°F)

# 7.3. Specific end use(s)

No specific usage precautions noted.

# **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## **Exposure limits**

No occupational exposure limit assigned.

# 8.2. Exposure controls

## Eye / face protection

Wear eye protection.

# **Hand protection**

Wear protective gloves. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Wash contaminated skin thoroughly after handling.

### Other skin protection

Wash skin thoroughly after handling.

#### Respiratory protection

Provide adequate ventilation.

## Environmental exposure controls

Avoid discharge into drains.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

#### Physical state

Solid

# Colour

White.

## **Odour**

No data available

# Melting point / freezing point

No data available

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# Boiling point or initial boiling point and boiling range

851.4°C at 760 mmHg

## **Flammability**

No data available

# Lower and upper explosion limit

No data available

# Flash point

No data available

# **Auto-ignition temperature**

No data available

# **Decomposition temperature**

No data available

## <u>pH</u>

No data available

## Kinematic viscosity

No data available

## **Solubility**

No data available

# Partition coefficient n-octanol/water

No data available

### Vapour pressure

No data available

# **Density and/or relative density**

No data available

# Relative vapour density

No data available

# Particle characteristics

No data available

# 9.2. Other information

No data available

# **SECTION 10: Stability and reactivity**

# 10.1. Reactivity

There are no known reactivity hazards associated with this product.

## 10.2. Chemical stability

Stable under the prescribed storage conditions.

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# 10.3. Possibility of hazardous reactions

No data available

# 10.4. Conditions to avoid

No data available

## 10.5. Incompatible materials

Strong oxidising agents.

# 10.6. Hazardous decomposition products

See section 5.

# **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Exposure route	Test animals
Citicoline 987-78-0 / 213-580-7	LD50	18,501 mg/kg	Oral	Rat

# Aspiration hazard

Based on available data, the classification criteria are not met.

# 11.2. Information on other hazards

No data available

# **SECTION 12: Ecological information**

# 12.1. Toxicity

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. Results of PBT and vPvB assessment

No data available

# 12.6. Endocrine disrupting properties

No data available

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#### 12.7. Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

## **Disposal considerations**

Dispose of contents/container in accordance with local/regional/national/international regulations.

# **SECTION 14: Transport information**

## 14.1. UN number

Not applicable

# 14.2. UN proper shipping name

Not applicable

# 14.3. Transport hazard class(es)

Not applicable

# 14.4. Packing group

Not applicable

#### 14.5. Environmental hazards

Not applicable

## 14.6. Special precautions for user

Not applicable

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU regulations</u>

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

# National regulations

No data available

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

# **SECTION 16: Other information**

No data available