

# Safety Data Sheet

Release 1.0  
Revision 11/16/2021  
Date of issue 04/27/2022

## 1 Identification of the substance

### 1.1 Product identifier

Identification of the substance (±)-Muscarine chloride hydrate

#### Additional identification

Catalogue Number RPD28055

REACH No. A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

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

Identified uses other biochemicals

Restriction on use not for food or drug use, for laboratory use only

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

Company Carbosynth Ltd  
8&9 Old Station Business Park  
COMPTON RG20 6NE  
Phone +44 1635 578444  
Mail customerservice@biosynth-carbosynth.com

### 1.4 Emergency telephone number

Phone 24hr/7days: +44 118 338 8269

## 2 Hazards identification

### 2.1 Classification of the substance or mixture

#### Physical Hazards

not classified

#### Health Hazards

not classified

Eye irritation (Category 2), H319

Acute toxicity oral (Category 4), H302

#### Environmental Hazards

not classified

### 2.2 Label elements

#### Regulatory List

EC1272/08 Regulation (EC) 1272/2008 (GHS/CLP)

#### Symbol

GHS07 exclamation mark

#### Pictogram



#### Signal Word

Warning Warning

#### Hazard Statement

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

#### Precautionary Statement

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

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P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Remove contact lenses, if possible.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents / container in accordance with local / regional / national / international regulations.

### 2.3 Other hazards

Caution! To the best of our knowledge the toxicological properties of this material have not been thoroughly investigated.

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## 3 Composition/information on ingredients

### Substance related information

<i>Substance name</i>	(±)-Muscarine chloride hydrate
<i>Synonyms</i>	
<i>Cas No.</i>	[2241280-55-5]
<i>Formula</i>	$C_9H_{20}NO_2 \cdot Cl \cdot (H_2O)_x$

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## 4 First aid measures

### 4.1 Description of first aid measures

#### First Aid: Eye

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

#### First Aid: Skin

Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

#### First Aid: Ingestion

Wash out mouth with water provided person is conscious. Call a physician.

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

#### Hints for Physician: Symptoms

See Section 11 for additional information on health hazards

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

#### First Aid: Inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

#### Hints for Physician: Treatment

Treat symptomatically.

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## 5 Firefighting measures

### 5.1 Extinguishing Media

#### Suitable

foam, dry extinguishing powder, carbon dioxide (CO<sub>2</sub>), water spray jet

### 5.2 Special hazards arising from the substance or mixture

Wear a self-contained breathing apparatus and chemical protective clothing.

### Hazards During Fire-Fighting

toxic fumes

### 5.3 Fire-Fighting/Further Advice

Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

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## 6 Accidental release measures

### 6.1 Personal Precautions, protective equipment and emergency procedures

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation.

### 6.2 Environmental Precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

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

not available

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**6.4 Further Accidental Release Measures**

Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Ventilate affected area.

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**7 Handling and storage****7.1 Precautions for safe handling****Handling advice**

Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities****Storage temperature**

store at 10°C - 25°C

**Storage condition**

close container well

**Storage Requirements**

Keep away from incompatible substances. Store in a cool, dry, well-ventilated area away from incompatible substances.

**7.3 Specific end use(s)**

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**8 Exposure controles/personal protection****8.1 Exposure limit values**

Does not contain any substances with occupational exposure limits.

**8.2 Exposure controles****Industrial Hygiene**

Mechanical exhaust required. Safety shower and eye shower.

**8.3 Personal Protective Equipment****Respiratory Protection**

Wear NIOSH/MSHA or European Standard EN 149 approved respirator.

**Hand Protection**

Wear compatible chemical-resistant gloves to prevent skin exposure.

**Eye Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA.

**Body Protection**

Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

**Advice on Safe Handling**

Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure.

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**9 Physical and chemical properties****9.1 Information on basic Physical and chemical color properties***Form*

powder

**9.2 Other information***Molar Mass*

209.71 g/mol

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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 reaction**

No Data Available

**10.4 Conditions to Avoid (SDS)**

incompatible materials

**10.5 Incompatible materials**

strong oxidizers

**10.6 Hazardous decomposition products**

nitrogen oxides (NO<sub>x</sub>), carbon dioxide (CO<sub>2</sub>), hydrogen chloride (HCl), carbon monoxide

**11 Toxicological information****11.1 Information on toxicological effects****Other Relevant Toxicity Information**

We are not aware of any toxicology data.

**12 Ecological Information****12.1 Toxicity**

<b>Acute toxicity versus Fishing</b>	Test Type	Species	Method	Exposure Time	Value in standard unit mg/l
	No data available	No data available	No data available	No data available	No data available
<b>Acute toxicity in aquatic plants</b>	Test Type	Species	Method	Exposure Time	Value in standard unit mg/l
	No data available	No data available	No data available	No data available	No data available
<b>Acute toxicity versus Daphnia and others aquatic invertebrates</b>	Test Type	Species	Method	Exposure Time	Value in standard unit mg/l
	No data available	No data available	No data available	No data available	No data available

**12.2 Persistence and degradability**

Remarks : no data available

**12.3 Bioaccumulative potential**

Remarks : no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

no data available

**13 Disposal considerations****Advice on Disposal and Packaging***Advice on Disposal*

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and Exhaust air. Dispose of waste according to laws applicable.

*Advice on Packaging*

not available

**14 Transport information**

	<b>Road Transport(ADR/GGVS)</b>	<b>Air Transport(IATA)</b>
<b>14.1 UN number</b>	Not Dangerous Goods	Not Dangerous Goods
<b>14.2 UN proper shipping name</b>	Not Dangerous Goods	Not Dangerous Goods
<b>14.3 Transport hazard class(es)</b>	Not Dangerous Goods	Not Dangerous Goods
<b>14.4 Packing group</b>	Not Dangerous Goods	Not Dangerous Goods
<b>14.5 Enviromental hazard class (es)</b>	Not Dangerous Goods	Not Dangerous Goods
<b>14.6 Special precautions for user</b>	Not applicable	Not applicable
<b>14.7 Transport in bulk according to Annex 11 of MARPOL and the IBC code</b>	Not applicable	Not applicable

**15 Other regulations****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

not available

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
(±)-Muscarine chloride hydrate	-----	-----	-----

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

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### 16 Additional information

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