

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.3 Revision Date 07.09.2021 Print Date 16.10.2021

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1 Product identifiers

Product name : Chlorocholine chloride

Product Number : C4049 Brand : Sigma

Index-No. : 007-003-00-6

REACH No. : A registration number is not available for this substance as the

substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 999-81-5

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Chemie GmbH

Eschenstrasse 5

D-82024 TAUFKIRCHEN

Telephone : +49 (0)89 6513-1130 Fax : +49 (0)89 6513-1161

E-mail address : technischerservice@merckgroup.com

1.4 Emergency telephone

Emergency Phone # : 0800 181 7059 (CHEMTREC Deutschland)

+49 (0)696 43508409 (CHEMTREC

weltweit)

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

#### 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Dermal (Category 4), H312

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

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Pictogram



Signal word Warning

Hazard statement(s)

H302 + H312 Harmful if swallowed or in contact with skin.

Precautionary statement(s)

P280

Wear protective gloves/ protective clothing.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel

unwell. Rinse mouth.

P302 + P352 + P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/

doctor if you feel unwell.

Supplemental Hazard

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

Signal word Warning

Hazard statement(s) none Precautionary none

statement(s)

Supplemental Hazard

Statements

none

Reduced Labeling (<= 125 ml)

Pictogram

Signal word

Warning

Hazard statement(s) none

Precautionary none

statement(s)

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

#### 3.1 Substances

Synonyms : (2-Chloroethyl)trimethylammonium chloride

Chlormequat chloride Choline dichloride

Formula :  $C_5H_{13}Cl_2N$ Molecular weight : 158,07 g/mol

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CAS-No. : 999-81-5 EC-No. : 213-666-4 Index-No. : 007-003-00-6

Component		Classification	Concentration
Clormequat chloric	le		
CAS-No. EC-No. Index-No.	999-81-5 213-666-4 007-003-00-6	Acute Tox. 4; Acute Tox. 3; H302, H311	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

#### 4.1 Description of first-aid measures

No data available

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

No data available

# 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Hydrogen chloride gas

# 5.3 Advice for firefighters

No data available

#### **5.4** Further information

No data available

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

# 6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

#### 6.2 Environmental precautions

No data available

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

No data available

# 6.4 Reference to other sections

For disposal see section 13.

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# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

For precautions see section 2.2.

#### 7.2 Conditions for safe storage, including any incompatibilities

hygroscopic

#### Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

# 8.1 Control parameters

Ingredients with workplace control parameters

#### 8.2 Exposure controls

**Personal protective equipment** 

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

# **Control of environmental exposure**

Prevent product from entering drains.



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

# Information on basic physical and chemical properties

Form: crystalline a) Appearance

Color: beige

b) Odor No data available c) Odor Threshold No data available

рΗ No data available d)

Melting point/range: 239 - 243 °C Melting e)

point/freezing point

Initial boiling point No data available f) and boiling range

No data available Flash point g) No data available h) Evaporation rate Flammability (solid, No data available i)

gas)

No data available

Upper/lower j) flammability or explosive limits

No data available k) Vapor pressure I) Vapor density No data available m) Density No data available Relative density No data available

No data available n) Water solubility

o) Partition coefficient: n-octanol/water

No data available

p) Autoignition temperature No data available

q) Decomposition temperature

No data available

r) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available

s) Explosive properties No data available Oxidizing properties No data available

#### Other safety information 9.2

No data available

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No data available

#### 10.2 Chemical stability

No data available

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## 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

hygroscopic

# 10.5 Incompatible materials

Strong oxidizing agents

# 10.6 Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral - Rat - 600 mg/kg

Remarks: (RTECS)

Inhalation: No data available LD50 Dermal - Rabbit - 232 mg/kg

Remarks: (RTECS)

#### Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

(Draize Test)

# Serious eye damage/eye 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

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available

#### 11.2 Additional Information

RTECS: BP5250000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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# **SECTION 12: Ecological information**

# 12.1 Toxicity

Toxicity to fish static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l

- 96 h

Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic

EC50 - Daphnia magna (Water flea) - 31,7 mg/l - 48 h Remarks: (ECOTOX Database)

invertebrates

Toxicity to algae EbC50 - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l

- 72 h

Remarks: (ECOTOX Database)

#### 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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

No data available

# **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 2811 IMDG: 2811 IATA: 2811

# 14.2 UN proper shipping name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Clormequat chloride) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Clormequat chloride) IATA: Toxic solid, organic, n.o.s. (Clormequat chloride)

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

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#### 14.6 Special precautions for user

No data available

# **SECTION 15: Regulatory information**

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

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

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H302 + H312 Harmful if swallowed or in contact with skin.

H311 Toxic in contact with skin. H312 Harmful in contact with skin.

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