# Chemical Safety Data Sheet MSDS / SDS

# **ACETIC-13C2 ACID**

Revision Date: 2023-11-29 Revision Number: 1

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

#### **Product identifier**

Product name : ACETIC-13C2 ACID

 CBnumber
 : CB6759801

 CAS
 : 1839-15-2

 Synonyms
 : acetic-13C2 acid

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

#### **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 400-158-6606

### SECTION 2: Hazards identification

#### GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Danger

#### Precautionary statements

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

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

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

#### Hazard statements

H400 Very toxic to aquatic life

H330 Fatal if inhaled

H314 Causes severe skin burns and eye damage

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : ACETIC-13C2 ACID

Synonyms : acetic-13C2 acid

CAS : 1839-15-2
MF : C2H3ClO2
MW : 96.47

#### SECTION 4: First aid measures

#### 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

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

No data available

# **SECTION 5: Firefighting measures**

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

Carbon oxides Hydrogen chloride gas

#### Advice for firefighters

No data available

#### **Further information**

No data available

### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For personal protection see section 8.

#### **Environmental precautions**

No data available

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

No data available

### Reference to other sections

For disposal see section 13.

# SECTION 7: Handling and storage

#### Precautions for safe handling

For precautions see section 2.2.

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

No data available

#### 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

#### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### **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.

# SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

Appearance	solid
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	Melting point/range: ca.62,44 °C
Initial boiling point and boiling range	ca.189 °C at ca.1.013 hPa
Flash point	ca.126 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	Lower explosion limit: ca.8 %(V)
limits	
Vapour pressure	ca.2 hPa at ca.50 °C ca.0,2 hPa at ca.20 °C
Vapour pressure Vapour density	ca.2 hPa at ca.50 °C ca.0,2 hPa at ca.20 °C  2.07 (vs air)
Vapour density	2.07 (vs air)
Vapour density Relative density	2.07 (vs air)  No data available
Vapour density Relative density Water solubility	2.07 (vs air)  No data available  No data available
Vapour density Relative density Water solubility Partition coefficient: n-octanol/water	2.07 (vs air)  No data available  No data available  No data available
Vapour density Relative density Water solubility Partition coefficient: n-octanol/water Autoignition temperature	2.07 (vs air)  No data available  No data available  No data available  No data available
Vapour density Relative density Water solubility Partition coefficient: n-octanol/water Autoignition temperature Decomposition temperature	2.07 (vs air)  No data available
Vapour density Relative density Water solubility Partition coefficient: n-octanol/water Autoignition temperature Decomposition temperature Viscosity	2.07 (vs air)  No data available  Viscosity, kinematic: No data available Viscosity, dynamic: No data available

#### Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

No data available

## **Chemical stability**

No data available

### Possibility of hazardous reactions

No data available

### Conditions to avoid

No data available

# Incompatible materials

Strong oxidizing agents, Strong bases, Strong reducing agents

#### Hazardous decomposition products

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - female - 90,4 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - 4 h - 0,38 - 0,45 mg/l Remarks:

(in analogy to similar products)

The value is given in analogy to the following substances: Acetic acid-13C2 LD50 Dermal - Rat - female - 305 mg/kg

(OECD Test Guideline 402) Remarks:

(in analogy to similar products)

The value is given in analogy to the following substances: chloroacetic acid

#### Skin corrosion/irritation

Skin - Rabbit

Result: Corrosive - 24 h Remarks:

(in analogy to similar products)

The value is given in analogy to the following substances: chloroacetic acid

#### Serious eye damage/eye irritation

No data available

### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

## Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

May cause respiratory irritation. Remarks:

(in analogy to similar products)

The value is given in analogy to the following substances: chloroacetic acid

#### Specific target organ toxicity - repeated exposure

No data available

### Aspiration hazard

No data available

# **SECTION 12: Ecological information**

#### **Toxicity**

#### Toxicity to algae

static test EC50 - Desmodesmus subspicatus (green algae) - 0,033 mg/l - 72 h

(OECD Test Guideline 201)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: chloroacetic acid

(Chloroacetic acid-13C2)

#### Persistence and degradability

No data available

#### **Bioaccumulative potential**

No data available

#### Mobility in soil

No data available

#### 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.

#### Other adverse effects

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

#### **Product**

No data available

# **SECTION 14: Transport information**

#### **UN** number

14.4

ADR/RID: 1751 IMDG: 1751 IATA: 1751

# UN proper shipping name

ADR/RID: CHLOROACETIC ACID, SOLID IMDG: CHLOROACETIC ACID, SOLID

IATA: Chloroacetic acid, solid

Transport hazard class(es) 14.3

ADR/RID: 6.1 (8) IMDG: 6.1 (8) IATA: 6.1 (8)

Packaging group

ADR/RID: II IMDG: II IATA: II

Environmental hazards

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

Special precautions for user

# **SECTION 15: Regulatory information**

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

#### Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

No data available

Vietnam National Chemical Inventory: Not Listed. website: https://chemicaldata.gov.vn/

United States Toxic Substances Control Act (TSCA) Inventory: Not Listed. website: https://www.epa.gov/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/

Korea Existing Chemicals List (KECL): Not Listed. website: http://ncis.nier.go.kr

European Inventory of Existing Commercial Chemical Substances (EINECS):Not Listed. website: https://echa.europa.eu/

EC Inventory: Not Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

#### SECTION 16: Other information

#### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

EC50: Effective Concentration 50%

IATA: International Air Transportation Association

IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit TWA: Time Weighted Average

#### References

[1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

[2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

[5] ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

[6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- 【10】 Sigma-Aldrich, website: https://www.sigmaaldrich.com/

#### Disclaimer:

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