Safety Data Sheet

Vinylene carbonate

Revision Date: 1/20/2022
Date Issued: 7/7/2022

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name	Vinylene carbonate
Product code	LBE-0080
CAS	872-36-6
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.
Identified uses	Laboratory chemicals, Manufacture of substances
Supplier	IoLiTec Ionic Liquids Technologies GmbH Im Zukunftspark 9 D – 74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Emergency telephone	+49 (0)151-41255671
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULTATION (EC) No 1272/2008)

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Dermal (Category 3), H311
Skin irritation (Category 2), H315

Serious eye damage (Category 1), H318
Skin sensitisation (Category 1), H317
Specific target organ toxicity - repeated exposure (Category 2), H373
Chronic aquatic toxicity (Category 2), H411

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Pictogram

Signal word	**Danger**
Hazard statement(s)	
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P273	Avoid release to the environment.
P280	Wear protective gloves/ eye protection/ face protection.
P305 + P351 + P338 IF IN EYES:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/ physician if you feel unwell.

P260	Do not breathe dust/ fumes/ gas/ mist/ vapours/ spray.
P270	Do not eat, drink or smoke when using this product.
P264	Wash with water and soap thoroughly after handling.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P310	Immediately call a physician.
P303+361+353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P370+378	In case of fire: Use powder, foam or CO2 to extinguish.
P405	Store locked up.
P403+235	Store in a well ventilated place. Keep cool.
P501	Dispose of contents/container to hazardous/special waste.

Supplemental Hazard Statements none

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health (Class)	Risk (H/R/No.)
Vinylene Carbonate	99%		H302, H311, H315,H317, H318, H373, H411

Safety Data Sheet

Vinylene carbonate

Revision Date: 1/20/2022
Date Issued: 7/7/2022

4 FIRST AID MEASURES

General	Contaminated clothing should be removed and washed before being reused.
Inhalation	Move the exposed person to fresh air. Immediately administer a corticosteroid. Get medical attention.
Ingestion	Immediately rinse mouth. Do not induce vomiting. Get medical attention immediately.
Skin	Wash the skin immediately with soap and water. Get medical attention.
Eyes	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately.

5 FIRE FIGHTING MEASURES

Extinguishing media	Use: Carbon dioxides (CO_2). Foam. Dry chemicals, sand, dolomite etc.
Special fire-fighting procedures	Vapors might accumulate in low area.
Unusual fire & explosion hazards	Fire causes formation of toxic gases, carbon oxides
Protective measures in fire	Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions during spill	Wear protective clothing and avoid inhalation of vapor, skin or eye contact. Avoid all sources of ignition (heat, sparks, open flame).

Safety Data Sheet

Vinylene carbonate

Revision Date: 1/20/2022
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Precautions to protect environment	Avoid washing into water courses. Avoid contaminating public drains or water supply.
Spill clean-up methods	Avoid contact with skin or inhalation of spillage, dust or vapour. Collect with inert absorbent (sand etc.) and reclaim or dispose in sealed containers in license waste. Use spark-proof tools and explosion-proof equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid contact with water. Neutralize with lime.

7 HANDLING AND STORAGE

Usage precautions	Keep away from heat, sparks and open flame..
Storage precautions	Store in sealed containers under nitrogen. Store at moderate temperatures in dry, well ventilated area. Store away from peroxides, flammable solids, toxic materials. Protect from temperatures over 40 ºC.
Storage criteria	Chemical storage, recommended storage 2-8°C.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection. tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety Data Sheet

Vinylene carbonate

Revision Date: 1/20/2022
Date Issued: 7/7/2022

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 EU Directive 89/686/EEC and the standard EN 374 derived from it.
Full contact
Material: butyl-rubber
Minimum layer thickness: 0,3 mm
Break through time: 480 min
Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M)
Splash contact
Material: Nature latex/chloroprene
Minimum layer thickness: 0,6 mm
Break through time: 51 min
Material tested: Lapren® (KCL 706 / Aldrich Z677558, 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 CE 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.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Safety Data Sheet

Vinylene carbonate

Revision Date: 1/20/2022
Date Issued: 7/7/2022

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	liquid or low melting solid
Color	light yellow to light brown.
Odor/taste	n/a
Melting point	19-22 °C
Boiling point	162 °C
Flash point	73 °C
Flammability	n/a
Autoignition	355 °C at 1.007,3 - 1.013 hPa
Density	1.35 (25°C)

10 STABILITY AND REACTIVITY

Stability	No particular stability concerns, if stored properly. Contains <150ppm BHT as stabilizer.
Conditions to avoid	Avoid all ignition sources, heat and sparks.
Hazardous Decomposition Products	High temperatures generate: Corrosive gases/vapor/fumes of: Carbon dioxide (CO_2). Carbon monoxide (CO).

11 TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - Rat - male and female - > 300 - < 500 mg/kg
(Directive 67/548/EEC, Annex V, B.1.)
LD50 Dermal - Rat - male and female - > 200 - < 2.000 mg/kg
(Directive 67/548/EEC, Annex V, B.3.)

Skin corrosion/irritation
Skin - Rabbit
Result: Skin irritation - 4 h
(OECD Test Guideline 404)
Serious eye damage/eye irritation
Eyes - Rabbit
Result: Risk of serious damage to eyes. - 24 h
(OECD Test Guideline 405)
Respiratory or skin sensitisation
- Mouse
Result: May cause sensitisation by skin contact.
Germ cell mutagenicity
Ames test
E. coli
Result: negative
Micronucleus test
Mouse - male
Result: negative
Carcinogenicity
Carcinogenicity - Rat - Subcutaneous
Tumorigenic:Neoplastic by RTECS criteria. Tumorigenic:Tumors at site or application.
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2,6-di-tert-Butyl-p-cresol)
Reproductive toxicity
No data available.
The product has not been tested. The statement has been derived from the properties of individual components.

12 ECOLOGICAL INFORMATION

Toxicity to fish mortality LC50 - Cyprinus carpio (Carp) - 2,4 mg/l - 96 h
(OECD Test Guideline 203)

Safety Data Sheet

Vinylene carbonate

Revision Date: 1/20/2022
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Toxicity to daphnia and other aquatic invertebrates
Immobilization EC50 - Daphnia magna (Water flea) - 4,9 mg/l - 48 h
(OECD Test Guideline 202)
Toxicity to algae static test EC50 - Pseudokirchneriella subcapitata (green algae) - 3,2 mg/l - 96h (OECD Test Guideline 201)
Toxicity to bacteria EC50 - Sludge Treatment - 100 mg/l - 3 h.

13 DISPOSAL CONSIDERATIONS

Disposal method

Contact specialist disposal companies. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 2810 IMDG: 2810 IATA: 2810

14.2 UN proper shipping name

TOXIC LIQUID, ORGANIC, N.O.S. (Vinylene carbonate)

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: yes IMDG Marine pollutant: yes IATA: no

Safety Data Sheet

Vinylene carbonate

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Date Issued: 7/7/2022

15 REGULATORY INFORMATION

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

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16 OTHER INFORMATION

DISCLAIMER

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