

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 02.12.2010

Revision: 02.12.2010

1 Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name

Vinylene carbonate

Stock number:

41400

CAS Number:

872-36-6

EINECS Number:

212-825-5

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

Sector of Use

SU24 Scientific research and development

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency telephone number:

Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240

2 Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R20/22: Harmful by inhalation and if swallowed.

Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.

Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The substance is classified and labelled according to the CLP regulation.



GHS07

Signal word

Warning

Hazard statements

H302 Harmful if swallowed.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

Designation: (CAS#)

Vinylene carbonate (CAS# 872-36-6)

Identification number(s):

EINECS Number:

212-825-5

Impurities and stabilising additives:

Hydroquinone (CAS# 123-31-9)

4 First aid measures

Description of first aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.
Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing

Seek immediate medical advice.

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents

Special hazards arising from the substance or mixture

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Advice for firefighters

Can be released in case of fire:
Carbon monoxide and carbon dioxide

Protective equipment:

Wear self-contained breathing apparatus.
Wear full protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Ensure adequate ventilation

Methods and material for containment and cleaning up:

Do not allow material to be released to the environment without proper governmental permits.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

(Contd. on page 2)
GB

Safety data sheet

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Revision: 02.12.2010

Trade name **Vinylene carbonate**

(Contd. of page 1)

Reference to other sections

Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

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

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Protect from heat.

Conditions for safe storage, including any incompatibilities**Storage**
Requirements to be met by storerooms and containers:
Information about storage in one common storage facility:

No special requirements.

Further information about storage conditions:

Do not store together with oxidizing and acidic materials.
Store away from reducing agents.
Store away from strong bases.

Refrigerate
Protect from heat and direct sunlight.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls/personal protection**Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters
Components with critical values that require monitoring at the workplace:
Additional information:

Not required.
No data

Exposure controls
Personal protective equipment
General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Use breathing protection with high concentrations.
Safety glasses
Face protection
Protective work clothing.

Breathing equipment:**Eye protection:****Body protection:****9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

Form: Clear liquid
Colour: Colourless

Smell: Yellow tint
Odour threshold: Not determined

pH-value: Not determined.

Change in condition

Melting point/Melting range: 19-22°C
Boiling point/Boiling range: 162-163°C
Sublimation temperature / start: Not determined

Flash point: 72°C

Ignition temperature: Not determined

Decomposition temperature: Not determined

Self-inflammability: Not determined.

Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: Not determined
Upper: Not determined

Steam pressure: Not determined

Density at 20°C 1.355 g/cm³
Relative density Not determined.
Vapour density Not determined.
Evaporation rate Not determined.

Segregation coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic: Not determined.

kinematic: Not determined.

Other information No further relevant information available.

10 Stability and reactivity**Reactivity**
Chemical stability
Thermal decomposition / conditions to be avoided:
Possibility of hazardous reactions
Incompatible materials:

No decomposition if used and stored according to specifications.
No dangerous reactions known
Acids

(Contd. on page 3)
GB

Safety data sheet
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(Contd. of page 2)

Hazardous decomposition products:

Oxidizing agents
Reducing agents
Bases
Carbon monoxide and carbon dioxide

11 Toxicological information**Information on toxicological effects****Acute toxicity:****Primary irritant effect:****on the skin:****on the eye:****Sensitization:****Additional toxicological information:**

Irritant for skin and mucous membranes.

Irritant effect.

No sensitizing effect known.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this product.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information**Toxicity****Aquatic toxicity:****Persistence and degradability****Behaviour in environmental systems:****Bioaccumulative potential****Mobility in soil****Additional ecological information:****General notes:**

No further relevant information available.

No further relevant information available.

No further relevant information available.

No further relevant information available.

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

Results of PBT and vPvB assessment**PBT:**

Not applicable.

vPvB:

Not applicable.

Other adverse effects

No further relevant information available.

13 Disposal considerations**Waste treatment methods****Recommendation**

Consult state, local or national regulations for proper disposal.

Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations.

Uncleaned packagings:**Recommendation:**

Disposal must be made according to official regulations.

14 Transport information**Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)****ADR/RID-GGVS/E Class:**

None

Maritime transport IMDG/GGVSea:**IMDG/GGVSea Class:**

None

Marine pollutant:

No

Air transport ICAO-TI and IATA-DGR:**ICAO/IATA Class:**

None

Special precautions for user

Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

15 Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****Labelling according to Regulation (EC) No**

1272/2008

Hazard pictograms

The substance is classified and labelled according to the CLP regulation.



GHS07

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present and easy to do. Continue rinsing.

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P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

National regulations**Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

For use only by technically qualified individuals.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.**Contact:** Ryan P. Wilson

(Contd. on page 4)

GB

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Trade name **Vinylene carbonate****Abbreviations and acronyms:**

(Contd. of page 3)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

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