

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 16 Aug 2022

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Ethyl methyl carbonate

### 1.1. Catalog No.:

687448

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Flammable liquids (Category 2), H225

### 2.2. Label elements

#### 2.2.1. Pictogram



#### 2.2.2.

2.2 Label elements  
Labelling according Regulation (EC) No 1272/2008  
Pictogram Signal word Danger Hazard statement(s)  
H225 Highly flammable liquid and vapor.  
Precautionary statement(s)  
P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.  
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

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Synonyms : Carbonic acid ethyl methyl ester

Formula : C<sub>4</sub>H<sub>8</sub>O<sub>3</sub>

Molecular weight : 104,10 g/mol

CAS-No. : 623-53-0

No components need to be disclosed according to the applicable regulations

#### **3.1.1. Formula**

C<sub>4</sub>H<sub>8</sub>O<sub>3</sub>

#### **3.1.2. Molecular Weight (g/mol)**

104.11

#### **3.1.3. CAS-No.**

623-53-0

### **4. FIRST AID MEASURES**

## 4.1 Description of first-aid measures

### General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

### Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse

mouth with water. Consult a physician.

## 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

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media

Dry powder Dry sand

Unsuitable extinguishing media

Do NOT use water jet.

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

Carbon oxides

Combustible.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

Use water spray to cool unopened containers

## 6. ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

### 6.4 Reference to other sections

For disposal see section 13

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid inhalation of vapor or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

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

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

### 7.3 Specific end use(s)

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

b) Odor No data available

c) Odor Threshold No data available

d) pH No data available

e) Melting

point/freezing point

No data available f) Initial boiling point

and boiling range

102 °C

g) Flash point 23,9 °C

h) Evaporation rate No data available

i) Flammability (solid,

gas)

No data available

j) Upper/lower

flammability or

explosive limits

No data available

k) Vapor pressure No data available

l) Vapor density No data available

m) Relative density No data available

n) Water solubility No data available

o) Partition coefficient:

n-octanol/water

No data available

p) Autoignition

temperature

No data available

q) Decomposition

temperature

No data available

r) Viscosity No data available

s) Explosive properties No data available

t) Oxidizing properties No data available

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity  
No data available
- 10.2 Chemical stability  
Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions  
No data available
- 10.4 Conditions to avoid  
Heat, flames and sparks.
- 10.5 Incompatible materials  
No data available
- 10.6 Hazardous decomposition products  
Other decomposition products - No data available  
Hazardous decomposition products formed under fire conditions. - Carbon oxides  
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
  - Acute toxicity  
LD50 Oral - Rat - male and female - > 5.000 mg/kg  
(OECD Test Guideline 401)
  - LC50 Inhalation - Rat - male and female - 4 h - > 17,6 mg/l  
(OECD Test Guideline 403)
  - Skin corrosion/irritation  
Skin - Rabbit  
Result: slight irritation - 4 h  
(Draize Test)  
Remarks: (ECHA)
  - Serious eye damage/eye irritation  
Eyes - Rabbit  
Result: slight irritation  
Remarks: (ECHA)
  - Respiratory or skin sensitization  
Sensitisation test (Magnusson and Kligman): - Guinea pig  
Result: Does not cause skin sensitization.  
(OECD Test Guideline 406)
  - Germ cell mutagenicity  
Ames test  
Escherichia coli/Salmonella typhimurium  
Result: negative  
(ECHA)
  - Mutagenicity (mammal cell test): chromosome aberration.  
Human lymphocytes  
Result: negative
  - 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  
No data available
  - Specific target organ toxicity - repeated exposure  
No data available
  - Aspiration hazard  
No data available
  - Additional Information  
Repeated dose toxicity - Rat - male - Oral - 28 d - NOAEL (No observed adverse effect level) - 1.000 mg/kg  
Repeated dose toxicity - Rat - female - Oral - 28 d - NOAEL (No observed adverse effect level) - 150 mg/kg  
RTECS: Not available  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.  
Properties which must be anticipated by analogy:  
Headache, Drowsiness, Nausea  
Further data:  
Other dangerous properties can not be excluded.  
Handle in accordance with good industrial hygiene and safety practice.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish semi-static test NOEC - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h

(Regulation (EC) No. 440/2008, Annex, C.1)

Toxicity to daphnia  
and other aquatic  
invertebrates

static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h  
(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Desmodesmus subspicatus (green algae) - > 62 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria Cell multiplication inhibition test EC50 - Pseudomonas putida - 760 mg/l - 16 h

(ISO 10712)

### 12.2 Persistence and degradability

Biodegradability Biochemical oxygen demand - Exposure time 28 d

Result: 98 % - Readily biodegradable.

(OECD Test Guideline 301C)

### 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

Harmful to aquatic life.

Discharge into the environment must be avoided

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations.

Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: 3272 IMDG: 3272 IATA: 3272

### 14.2 UN proper shipping name

ADR/RID: ESTERS, N.O.S. (ethyl methyl carbonate)

IMDG: ESTERS, N.O.S. (ethyl methyl carbonate)

IATA: Esters, n.o.s. (ethyl methyl carbonate)

### 14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

### 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

### 14.5 Environmental hazards

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

### 14.6 Special precautions for user

No data available

## 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.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

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:

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!