acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS



Replaces version of: 2021-11-17

Version: (2)



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

#### **Product identifier** 1.1

Identification of the substance **2-Methoxyethanol** ROTIPURAN® ≥99,3 %, p.a.,

ACS

Article number CP08

Index No (GB CLP) 603-011-00-4 EC number 203-713-7 CAS number 109-86-4

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

Relevant identified uses: Laboratory chemical

Laboratory and analytical use

Uses advised against: Do not use for products which come into contact

with foodstuffs. Do not use for private purposes (household). Food, drink and animal feeding-

stuffs.

1.3 Details of the supplier of the safety data sheet

> Carl Roth GmbH + Co. KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

Telephone:+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 e-mail: sicherheit@carlroth.de Website: www.carlroth.de

sheet:

e-mail (competent person): sicherheit@carlroth.de

#### 1.4 **Emergency telephone number**

| Name   | Street    | Postal code/city     | Telephone    | Website |
|--|-----------|----------------------|--------------|---------|
| National Poisons Information<br>Service<br>City Hospital | Dudley Rd | B187QH<br>Birmingham | 844 892 0111 |         |

United Kingdom (en) Page 1 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



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

#### 2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class            | Cat-<br>egory | Hazard class and category | Hazard<br>statement |
|---------|-------------------------|---------------|---------------------------|---------------------|
| 2.6     | Flammable liquid        | 3             | Flam. Liq. 3              | H226                |
| 3.10    | Acute toxicity (oral)   | 4             | Acute Tox. 4              | H302                |
| 3.1D    | Acute toxicity (dermal) | 4             | Acute Tox. 4              | H312                |
| 3.1I    | Acute toxicity (inhal.) | 4             | Acute Tox. 4              | H332                |
| 3.7     | Reproductive toxicity   | 1B            | Repr. 1B                  | H360FD              |

For full text of abbreviations: see SECTION 16

### The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

#### 2.2 Label elements

### Labelling

Signal word Danger

#### **Pictograms**

GHS02, GHS07, GHS08







#### **Hazard statements**

H226 Flammable liquid and vapour

H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled H360FD May damage fertility. May damage the unborn child

### **Precautionary statements**

#### **Precautionary statements - prevention**

P210 Keep away from heat. No smoking P280 Wear protective gloves/eye protection

### **Precautionary statements - response**

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower]

P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor

For professional users only

United Kingdom (en) Page 2 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



#### 2.3 Other hazards

#### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq$  0,1%.

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

#### 3.1 Substances

Name of substance 2-Methoxyethanol

Molecular formula  $C_3H_8O_2$  Molar mass  $76,1\,^9/_{mol}$  CAS No 109-86-4 EC No 203-713-7 Index No (GB CLP) 603-011-00-4

### **Substance of Very High Concern (SVHC)**

| Name of substance | CAS No   | EC No     | Listed in      | Remarks    |
|-------------------|----------|-----------|----------------|------------|
| 2-Methoxyethanol  | 109-86-4 | 203-713-7 | Candidate list | Repr. A57c |

#### Legend

Candidate Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV

Repr. A57c Toxic for reproduction (article 57c)

### Substance, Specific Conc. Limits, M-factors, ATE

| Specific Conc. Limits | M-Factors | ATE   | Exposure route                       |
|-----------------------|-----------|---|--------------------------------------|
| -                     | -         | 500 <sup>mg</sup> / <sub>kg</sub><br>1.100 <sup>mg</sup> / <sub>kg</sub><br>11 <sup>mg</sup> / <sub>l</sub> /4h | oral<br>dermal<br>inhalation: vapour |

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

### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

### **Following inhalation**

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower.

United Kingdom (en) Page 3 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



#### Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Call a doctor.

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

Vomiting

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

none

## **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings! water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

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

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

#### **Hazardous combustion products**

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

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

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



### For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

United Kingdom (en) Page 4 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Provision of sufficient ventilation. Avoid exposure.

### Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge.

### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

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

Keep container tightly closed.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

#### **Consideration of other advice:**

Ground/bond container and receiving equipment.

#### **Ventilation requirements**

Keep any substance that emits harmful vapours or gases in a place that allows these to be permanently extracted. Use local and general ventilation.

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

### 7.3 Specific end use(s)

No information available.

United Kingdom (en) Page 5 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



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

#### **Control parameters**

### **National limit values**

#### **Occupational exposure limit values (Workplace Exposure Limits)**

| Cou<br>ntr<br>y | Name of agent    | CAS No   | Identi-<br>fier | TW<br>A<br>[pp<br>m] | TWA<br>[mg/<br>m³] | STE [pp m] | STEL<br>[mg/<br>m³] | Ceil<br>ing-<br>C<br>[pp<br>m] | Ceil-<br>ing-C<br>[mg/<br>m³] | Nota-<br>tion | Source          |
|-----------------|------------------|----------|-----------------|----------------------|--------------------|------------|---------------------|--------------------------------|-------------------------------|---------------|-----------------|
| EU              | 2-methoxyethanol | 109-86-4 | IOELV           | 1                    |                    |            |                     |                                |                               | Н             | 2022/<br>431/EU |
| GB              | 2-methoxyethanol | 109-86-4 | WEL             | 1                    | 3                  |            |                     |                                |                               |               | EH40/<br>2005   |

#### **Notation**

Ceiling-C

H STEL

Ceiling value is a limit value above which exposure should not occur
Absorbed through the skin
Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)
Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 TWA

hours time-weighted average (unless otherwise specified)

### **Human health values**

### **Relevant DNELs and other threshold levels**

| Endpoint | Threshold<br>level | Protection goal, route of exposure | Used in           | Exposure time              |
|----------|--------------------|------------------------------------|-------------------|----------------------------|
| DNEL     | 0,91 mg/kg         | human, dermal                      | worker (industry) | chronic - systemic effects |
| DNEL     | 3,2 mg/m³          | human, inhalatory                  | worker (industry) | chronic - systemic effects |

#### **Environmental values**

#### **Relevant PNECs and other threshold levels**

| End-<br>point | Threshold<br>level                 | Organism              | Environmental com-<br>partment  | Exposure time                |
|---------------|------------------------------------|-----------------------|---------------------------------|------------------------------|
| PNEC          | 10 <sup>mg</sup> / <sub>l</sub>    | aquatic organisms     | freshwater                      | short-term (single instance) |
| PNEC          | 1 <sup>mg</sup> / <sub>l</sub>     | aquatic organisms     | marine water                    | short-term (single instance) |
| PNEC          | 1.000 <sup>mg</sup> / <sub>l</sub> | aquatic organisms     | sewage treatment plant<br>(STP) | short-term (single instance) |
| PNEC          | 36,8 <sup>mg</sup> / <sub>kg</sub> | aquatic organisms     | freshwater sediment             | short-term (single instance) |
| PNEC          | 3,68 <sup>mg</sup> / <sub>kg</sub> | aquatic organisms     | marine sediment                 | short-term (single instance) |
| PNEC          | 7,3 <sup>mg</sup> / <sub>kg</sub>  | aquatic organisms     | water                           | short-term (single instance) |
| PNEC          | 1,87 <sup>mg</sup> / <sub>kg</sub> | terrestrial organisms | soil                            | short-term (single instance) |
| PNEC          | 94 <sup>mg</sup> / <sub>l</sub>    | aquatic organisms     | water                           | intermittent release         |

United Kingdom (en) Page 6 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



#### 8.2 Exposure controls

#### Individual protection measures (personal protective equipment)

#### **Eye/face protection**





Use safety goggle with side protection.

#### Skin protection





#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

#### type of material

NBR (Nitrile rubber)

#### material thickness

>0,11 mm

#### · breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

### **Respiratory protection**





Respiratory protection necessary at: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

#### **Environmental exposure controls**

Keep away from drains, surface and ground water.

United Kingdom (en) Page 7 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



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

#### 9.1 Information on basic physical and chemical properties

Physical state liquid

Colour colourless
Odour like ether

Melting point/freezing point -85,1 °C at 1 atm (ECHA) Boiling point or initial boiling point and boiling 123,5 – 125,5 °C (ECHA)

range

Flammability flammable liquid in accordance with GHS criteria

Lower and upper explosion limit 2,3 vol% (LEL) - 24,5 vol% (UEL)

Flash point  $37 \, ^{\circ}\text{C} \, (\text{c.c.})$  Auto-ignition temperature  $285 \, ^{\circ}\text{C} \, (\text{ECHA})$  Decomposition temperature not relevant

pH (value) 4-7 (in aqueous solution:  $200 \, ^{9}/_{l}$ ,  $20 \, ^{\circ}$ C)

Kinematic viscosity  $1.6 \, \mathrm{mm^2/_s}$  at 20 °C Dynamic viscosity  $1.7 \, \mathrm{mPa}$  s at 20 °C

Solubility(ies)

Water solubility 965  $^{9}/_{1}$  at 20  $^{\circ}$ C (ECHA)

Partition coefficient

Partition coefficient n-octanol/water (log value): -0,77 (pH value: 7, 28 °C) (ECHA)

Vapour pressure 11 hPa at 20 °C 60 hPa at 50 °C

Density and/or relative density

Density 0,964 – 0,966 <sup>g</sup>/<sub>cm³</sub> at 20 °C

Relative vapour density 2,63 (air = 1)

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard There is no additional information. classes:

Other safety characteristics:

United Kingdom (en) Page 8 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08

Refractive index 1,402



## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

It's a reactive substance. Risk of ignition.

#### If heated

Risk of ignition. Vapours may form explosive mixtures with air.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 10.3 Possibility of hazardous reactions

Alkalis, Aluminium, Magnesium, Zinc, **Violent reaction with:** strong oxidiser

#### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5 Incompatible materials

copper, light metal

#### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

## **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Classification acc. to GHS

#### **Acute toxicity**

Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

#### **Acute toxicity**

| Exposure route | Endpoint | Value                               | Species | Method | Source |
|----------------|----------|-------------------------------------|---------|--------|--------|
| oral           | LD50     | 2.257 <sup>mg</sup> / <sub>kg</sub> | rat     |        | ECHA   |
| dermal         | LD50     | 3.930 <sup>mg</sup> / <sub>kg</sub> | rabbit  |        | ECHA   |

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

### **Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

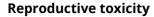
Shall not be classified as carcinogenic.

United Kingdom (en) Page 9 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



May damage the unborn child. May damage fertility.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

### Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

Data are not available.

#### • If in eyes

Data are not available.

#### If inhaled

Data are not available.

#### • If on skin

Data are not available.

#### Other information

This information is based upon the present state of our knowledge.

### 11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq$  0,1%.

#### 11.3 Information on other hazards

There is no additional information.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

### **Aquatic toxicity (acute)**

| Endpoint | Value                                | Species               | Source | Exposure<br>time |
|----------|--------------------------------------|-----------------------|--------|------------------|
| LC50     | >10.000 <sup>mg</sup> / <sub>l</sub> | fish                  | ECHA   | 96 h             |
| EC50     | 27.000 <sup>mg</sup> / <sub>l</sub>  | aquatic invertebrates | ECHA   | 48 h             |
| ErC50    | 25.500 <sup>mg</sup> / <sub>l</sub>  | algae                 | ECHA   | 72 h             |

### **Aquatic toxicity (chronic)**

| Endpoint | Value                               | Species        | Source | Exposure<br>time |
|----------|-------------------------------------|----------------|--------|------------------|
| EC50     | >1.000 <sup>mg</sup> / <sub>l</sub> | microorganisms | ECHA   | 3 h              |

United Kingdom (en) Page 10 / 19



acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



Theoretical Oxygen Demand: 1,682 <sup>mg</sup>/<sub>mg</sub> Theoretical Carbon Dioxide: 1,735 <sup>mg</sup>/<sub>mg</sub>

**Biodegradation** 

The substance is readily biodegradable.

### **Process of degradability**

| Process          | Degradation rate | Time |
|------------------|------------------|------|
| biotic/abiotic   | 97 %             | 10 d |
| oxygen depletion | 88 %             | 20 d |

#### 12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

| n-octanol/water (log KOW) -0,77 (pH value: 7, 28 °C) (ECHA) |
|---|
|---|

#### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq$  0,1%.

#### 12.7 Other adverse effects

Data are not available.

### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

### Properties of waste which render it hazardous

**HP 3** flammable **HP 6** acute toxicity

**HP 10** toxic for reproduction

United Kingdom (en) Page 11 / 19



acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

## **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADRRID UN 1188
IMDG-Code UN 1188
ICAO-TI UN 1188

14.2 UN proper shipping name

ADRRID ETHYLENE GLYCOL MONOMETHYL ETHER

IMDG-Code ETHYLENE GLYCOL MONOMETHYL ETHER

ICAO-TI Ethylene glycol monomethyl ether

14.3 Transport hazard class(es)

ADRRID 3
IMDG-Code 3
ICAO-TI 3

14.4 Packing group

ADRRID III
IMDG-Code III
ICAO-TI III

**14.5** Environmental hazards non-environmentally hazardous acc. to the dan-

gerous goods regulations

#### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

#### 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### 14.8 Information for each of the UN Model Regulations

# Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

Proper shipping name ETHYLENE GLYCOL MONOMETHYL ETHER

Particulars in the transport document UN1188, ETHYLENE GLYCOL MONOMETHYL ETH-

ER, 3, III, (D/E)

Classification code F1
Danger label(s) 3



Excepted quantities (EQ) E1

United Kingdom (en) Page 12 / 19



acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08

Limited quantities (LQ) 5 L

Transport category (TC) 3

Tunnel restriction code (TRC) D/E

Hazard identification No 30

Emergency Action Code 2Y

Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional

information

Classification code F1

Danger label(s) 3

3

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 L
Transport category (TC) 3
Hazard identification No 30

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name ETHYLENE GLYCOL MONOMETHYL ETHER

Particulars in the shipper's declaration UN1188, ETHYLENE GLYCOL MONOMETHYL ETH-

ER, 3, III, 37°C c.c.

Marine pollutant Danger label(s) 3



Special provisions (SP) 
Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

EmS F-E, S-D

Stowage category A

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Ethylene glycol monomethyl ether

Particulars in the shipper's declaration UN1188, Ethylene glycol monomethyl ether, 3, III

Danger label(s) 3



Excepted quantities (EQ) E1
Limited quantities (LQ) 10 L

United Kingdom (en) Page 13 / 19



acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

#### **Seveso Directive**

| 2012/18/EU (Seveso III) |                                       |  |        |       |
|-------------------------|---------------------------------------|--|--------|-------|
| No                      | Dangerous substance/hazard categories | Qualifying quantity<br>plication of lower<br>quire |        | Notes |
| P5c                     | flammable liquids (cat. 2, 3)         | 5.000  | 50.000 | 51)   |

#### Notation

51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b

#### **Deco-Paint Directive**

| VOC content | 100 %                           |
|-------------|---------------------------------|
| VOC content | 966 <sup>g</sup> / <sub>l</sub> |

#### **Industrial Emissions Directive (IED)**

| VOC content | 100 %                           |
|-------------|---------------------------------|
| VOC content | 966 <sup>g</sup> / <sub>l</sub> |

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

#### **Water Framework Directive (WFD)**

#### **List of pollutants (WFD) CAS No** Listed in Name of substance Name acc. to inventory **Remarks** 2-Methoxyethanol Substances and preparations, or a) the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrinerelated functions in or via the aquatic environment

#### Legend

a) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

not listed

**Regulation on drug precursors** 

not listed

United Kingdom (en) Page 14 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



Regulation on substances that deplete the ozone layer (ODS)

not listed

Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

Regulation on persistent organic pollutants (POP)

not listed

National regulations(GB)

List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

## Substance of Very High Concern (SVHC) acc. to GB REACH and HSE

| Name of substance | CAS No   | Listed in      | Remarks    |
|-------------------|----------|----------------|------------|
| 2-Methoxyethanol  | 109-86-4 | Candidate list | Repr. A57c |

Legend

Candidate Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV

Repr. A57c Toxic for reproduction (Article 57c)

### Restrictions according to GB REACH, Annex 17

#### Dangerous substances with restrictions (GB REACH, Annex 17)

| Name of substance Name acc. to inventory CAS No |  | No     |     |
|---|--|--------|-----|
| Ivallie of substance                            | Name acc. to inventory   | CAS NO | INU |
| 2-Methoxyethanol                                | this product meets the criteria for classi-<br>fication in accordance with Regulation No<br>1272/2008/EC |        | 3   |
| 2-Methoxyethanol                                | toxic for reproduction   |        | 30  |
| 2-Methoxyethanol                                | flammable / pyrophoric   |        | 40  |

#### Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

#### **National inventories**

| Country | Inventory  | Status              |
|---------|------------|---------------------|
| AU      | AIIC       | substance is listed |
| CA      | DSL        | substance is listed |
| CN      | IECSC      | substance is listed |
| EU      | ECSI       | substance is listed |
| EU      | REACH Reg. | substance is listed |
| JP      | CSCL-ENCS  | substance is listed |
| KR      | KECI       | substance is listed |
| MX      | INSQ       | substance is listed |
| NZ      | NZIoC      | substance is listed |
| PH      | PICCS      | substance is listed |

United Kingdom (en) Page 15 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08

| Country | Inventory | Status                       |
|---------|-----------|------------------------------|
| TR      | CICR      | substance is listed          |
| TW      | TCSI      | substance is listed          |
| US      | TSCA      | substance is listed (ACTIVE) |
| VN      | NCI       | substance is listed          |

Legend

AIIC CICR CSCL-ENCS DSL ECSI

**IECSC** 

Australian Inventory of Industrial Chemicals
Chemical Inventory and Control Regulation
List of Existing and New Chemical Substances (CSCL-ENCS)
Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China
National Inventory of Chemical Substances
Korea Existing Chemicals Inventory
National Chemical Inventory **KECI** 

NCI National Chemical Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substance Inventory

Toxic Substance Control Act

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

## **SECTION 16: Other information**

### Indication of changes (revised safety data sheet)

| Section | Former entry (text/value)  | Actual entry (text/value)  | Safety-<br>relev-<br>ant |
|---------|--|--|--------------------------|
| 2.2     | Labelling of packages where the contents do<br>not exceed 125 ml:<br>Signal word: Danger |  | yes                      |
| 2.2     |  | Labelling of packages where the contents do<br>not exceed 125 ml:<br>change in the listing (table)                 | yes                      |
| 2.2     |  | Labelling of packages where the contents do<br>not exceed 125 ml:<br>change in the listing (table)                 | yes                      |
| 2.2     |  | Labelling of packages where the contents do<br>not exceed 125 ml:<br>change in the listing (table)                 | yes                      |
| 2.3     |  | Endocrine disrupting properties:<br>Does not contain an endocrine disruptor (ED) at<br>a concentration of ≥ 0,1%.  | yes                      |
| 14.8    |  | Regulations concerning the International Car-<br>riage of Dangerous Goods by Rail (RID)Addition-<br>al information | yes                      |
| 14.8    |  | Classification code:<br>F1   | yes                      |
| 14.8    |  | Danger label(s):<br>3  | yes                      |
| 14.8    |  | Danger label(s):<br>change in the listing (table)  | yes                      |

United Kingdom (en) Page 16 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

## 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



| Section | Former entry (text/value)   | Actual entry (text/value)   | Safety-<br>relev-<br>ant |
|---------|---|---|--------------------------|
| 14.8    |   | Excepted quantities (EQ):<br>E1   | yes                      |
| 14.8    |   | Limited quantities (LQ):<br>5 L   | yes                      |
| 14.8    |   | Transport category (TC):<br>3   | yes                      |
| 14.8    |   | Hazard identification No:<br>30   | yes                      |
| 15.1    | Restrictions according to REACH, Annex XVII   |   | yes                      |
| 15.1    |   | Dangerous substances with restrictions (REACH,<br>Annex XVII):<br>change in the listing (table)     | yes                      |
| 15.1    | List of substances subject to authorisation<br>(REACH, Annex XIV)/SVHC - candidate list |   | yes                      |
| 15.1    |   | Substance of Very High Concern (SVHC):<br>change in the listing (table)                             | yes                      |
| 15.1    | VOC content:<br>100 %<br>, 966 <sup>g</sup> / <sub>l</sub>                              | VOC content:<br>100 %   | yes                      |
| 15.1    |   | VOC content:<br>966 <sup>g</sup> / <sub>l</sub>   | yes                      |
| 15.1    |   | National regulations(GB)  | yes                      |
| 15.1    |   | List of substances subject to authorisation (GB<br>REACH, Annex 14) / SVHC - candidate list         | yes                      |
| 15.1    |   | Substance of Very High Concern (SVHC) acc. to<br>GB REACH and HSE:<br>change in the listing (table) | yes                      |
| 15.1    |   | Restrictions according to GB REACH, Annex 17  | yes                      |
| 15.1    |   | Dangerous substances with restrictions (GB<br>REACH, Annex 17):<br>change in the listing (table)    | yes                      |
| 15.1    |   | National inventories:<br>change in the listing (table)  | yes                      |

## **Abbreviations and acronyms**

| Abbr.       | Descriptions of used abbreviations   |
|-------------|--|
| 2022/431/EU | Directive (EU) 2022/431 of the European Parliament and of the Council of 9 March 2022 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work |
| ADR         | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)  |
| ATE         | Acute Toxicity Estimate  |
| CAS         | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)   |
| Ceiling-C   | Ceiling value  |
| DGR         | Dangerous Goods Regulations (see IATA/DGR)   |

United Kingdom (en) Page 17 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)

## 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08



| Abbr.     | Descriptions of used abbreviations  |
|-----------|---|
| DNEL      | Derived No-Effect Level   |
| EC50      | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval  |
| EC No     | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |
| ED        | Endocrine disruptor   |
| EH40/2005 | EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li-<br>cence/)  |
| EINECS    | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS    | European List of Notified Chemical Substances   |
| EmS       | Emergency Schedule  |
| ErC50     | ≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control            |
| GB CLP    | The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/720 (as amended)                        |
| GB REACH  | The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)  |
| GHS       | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |
| HSE       | Health and Safety Executive   |
| IATA      | International Air Transport Association   |
| IATA/DGR  | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO      | International Civil Aviation Organization   |
| ICAO-TI   | Technical instructions for the safe transport of dangerous goods by air   |
| IMDG      | International Maritime Dangerous Goods Code   |
| IMDG-Code | International Maritime Dangerous Goods Code   |
| index No  | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008  |
| IOELV     | Indicative occupational exposure limit value  |
| LC50      | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval                                 |
| LD50      | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval  |
| LEL       | Lower explosion limit (LEL)   |
| NLP       | No-Longer Polymer   |
| PBT       | Persistent, Bioaccumulative and Toxic   |
| PNEC      | Predicted No-Effect Concentration   |
| ppm       | Parts per million   |
| REACH     | Registration, Evaluation, Authorisation and Restriction of Chemicals  |
| Repr.     | Reproductive toxicity   |

United Kingdom (en) Page 18 / 19

acc. to Regulation (EC) No. 1907/2006 (REACH)



#### 2-Methoxyethanol ROTIPURAN® ≥99,3 %, p.a., ACS

article number: CP08

| Abbr. | Descriptions of used abbreviations   |
|-------|--|
| RID   | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula-<br>tions concerning the International carriage of Dangerous goods by Rail) |
| STEL  | Short-term exposure limit  |
| TWA   | Time-weighted average  |
| UEL   | Upper explosion limit (UEL)  |
| VOC   | Volatile Organic Compounds   |
| vPvB  | Very Persistent and very Bioaccumulative   |
| WEL   | Workplace exposure limit   |

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code   | Text   |
|--------|--|
| H226   | Flammable liquid and vapour.                       |
| H302   | Harmful if swallowed.                              |
| H312   | Harmful in contact with skin.                      |
| H332   | Harmful if inhaled.                                |
| H360FD | May damage fertility. May damage the unborn child. |

#### **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

United Kingdom (en) Page 19 / 19