

## Safety Data Sheet

according to UK REACH Regulation

### Potassium hydroxide 0.5 mol/l - 0.5 N solution in methanol

Revision date: 07.03.2024

Product code: 05069

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

##### 1.1. Product identifier

Potassium hydroxide 0.5 mol/l - 0.5 N solution in methanol

UFI: 061F-S0H9-W00K-WKC7

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

###### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

###### Uses advised against

Do not use for private purposes (household).

##### 1.3. Details of the supplier of the safety data sheet

|                         |                                  |                              |
|-------------------------|----------------------------------|------------------------------|
| Company name:           | AnalytiChem GmbH                 |                              |
|                         | ACD                              |                              |
| Street:                 | Stempelstraße 6                  |                              |
| Place:                  | D-47167 Duisburg                 |                              |
| Telephone:              | 0203/5194-0                      | Telefax: 0203/5194-290       |
| E-mail:                 | info@analytichem.de              |                              |
| Contact person:         | Abteilung Produktsicherheit      | Telephone: 0203/5194-107/117 |
| E-mail:                 | produktsicherheit@analytichem.de |                              |
| Internet:               | www.analytichem.de               |                              |
| Responsible Department: | Abteilung Produktsicherheit      |                              |

##### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

##### Further Information

inapplicable, this product is a mixture REACH registration number see section 3

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### GB CLP Regulation

Met. Corr. 1; H290

Flam. Liq. 2; H225

Acute Tox. 3; H301

Acute Tox. 3; H311

Acute Tox. 3; H331

Skin Corr. 1B; H314

Eye Dam. 1; H318

STOT SE 1; H370

Full text of hazard statements: see SECTION 16.

##### 2.2. Label elements

###### GB CLP Regulation

###### Hazard components for labelling

methanol

potassium hydroxide

Signal word: Danger

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**Pictograms:**



**Hazard statements**

- H225 Highly flammable liquid and vapour.
- H290 May be corrosive to metals.
- H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
- H314 Causes severe skin burns and eye damage.
- H370 Causes damage to organs.

**Precautionary statements**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P240 Ground and bond container and receiving equipment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P311 IF exposed or concerned: Call a POISON CENTER/doctor.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.

**2.3. Other hazards**

No data available

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures**

**Relevant ingredients**

| CAS No    | Chemical name   |              |                  | Quantity    |
|-----------|---|--------------|------------------|-------------|
|           | EC No   | Index No     | REACH No         |             |
|           | Classification (GB CLP Regulation)  |              |                  |             |
| 67-56-1   | methanol  |              |                  | 85 - < 90 % |
|           | 200-659-6   | 603-001-00-X | 01-2119433307-44 |             |
|           | Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370 |              |                  |             |
| 1310-58-3 | potassium hydroxide   |              |                  | 1 - < 5 %   |
|           | 215-181-3   | 019-002-00-8 | 01-2119487136-33 |             |
|           | Met. Corr. 1, Acute Tox. 4, Skin Corr. 1A; H290 H302 H314                                   |              |                  |             |

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

| CAS No    | EC No     | Chemical name  | Quantity    |
|-----------|-----------|--|-------------|
|           |           | Specific Conc. Limits, M-factors and ATE   |             |
| 67-56-1   | 200-659-6 | methanol   | 85 - < 90 % |
|           |           | inhalation: LC50 = 128,2 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: ATE = 300 mg/kg; oral: LD50 = 6000 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371: >= 3 - < 10 |             |
| 1310-58-3 | 215-181-3 | potassium hydroxide  | 1 - < 5 %   |
|           |           | oral: LD50 = 333 mg/kg Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2  |             |

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#### Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection!

#### After inhalation

Provide fresh air.

If breathing is irregular or stopped, administer artificial respiration.

Call a physician immediately.

#### After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

#### After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an ophthalmologist.

#### After ingestion

Provide fresh air.

Do not allow a neutralisation agent to be drunk.

Call a physician immediately.

Notes for the doctor : Methanol

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

corrosive, Irritant, Dizziness, Dizziness

Anaesthetic state, Agitation, Spasms

Inebriation, Vomiting, Headache

Impairment of vision, Dyspnoea, Cough

Repeated exposure may cause skin dryness or cracking.

Risk of serious damage to eyes.

Circulatory collapse, Corneal opacity.

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

Notes for the doctor : Methanol

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>)

Foam

Extinguishing powder

#### Unsuitable extinguishing media

no restriction

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

Combustible liquids

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Hazardous combustion products

In case of fire may be liberated: Carbon dioxide, Carbon monoxide

Beware of reignition.

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Heating causes rise in pressure with risk of bursting.

#### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

Wear full chemical protective clothing.

In case of fire and/or explosion do not breathe fumes.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

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

##### **General advice**

Keep away from sources of ignition - No smoking.

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

Take action to prevent static discharges.

Corrosive to metals.

##### **For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

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

##### **For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### **6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

Do not allow to enter into surface water or drains.

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Danger of explosion

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

##### **For containment**

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

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

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

##### **Other information**

Provide adequate ventilation.

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

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### **6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Avoid exposure - obtain special instructions before use.  
If handled uncovered, arrangements with local exhaust ventilation have to be used.  
Read label before use. Handle and open container with care.  
When using do not eat, drink, smoke, sniff. Keep container tightly closed.  
Use personal protection equipment. Use extractor hood (laboratory).  
Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.  
Vapours can form explosive mixtures with air.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.  
Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

**Further information on handling**

Take off immediately all contaminated clothing and wash it before reuse.  
Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. If handled uncovered, arrangements with local exhaust ventilation have to be used.

**7.2. Conditions for safe storage, including any incompatibilities**

**Requirements for storage rooms and vessels**

Keep in a cool, well-ventilated place.  
Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Unsuitable container/equipment material: Aluminium, tin, zinc

**Hints on joint storage**

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.  
national regulations

**Further information on storage conditions**

Keep cool. Protect from sunlight.  
storage temperature +15°C - +25°C

**7.3. Specific end use(s)**

Laboratory chemicals

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

**8.1. Control parameters**

**Exposure limits (EH40)**

| CAS No    | Substance           | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|-----------|---------------------|-----|-------------------|-----------|---------------|--------|
| 67-56-1   | Methanol            | 200 | 266               |           | TWA (8 h)     | WEL    |
|           |                     | 250 | 333               |           | STEL (15 min) | WEL    |
| 1310-58-3 | Potassium hydroxide | -   | 2                 |           | STEL (15 min) | WEL    |

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#### DNEL/DMEL values

| CAS No                   | Substance           | Exposure route | Effect   | Value                 |
|--------------------------|---------------------|----------------|----------|-----------------------|
| 67-56-1                  | methanol            |                |          |                       |
| Consumer DNEL, acute     |                     | inhalation     | systemic | 50 mg/m <sup>3</sup>  |
| Worker DNEL, long-term   |                     | inhalation     | systemic | 260 mg/m <sup>3</sup> |
| Worker DNEL, acute       |                     | inhalation     | systemic | 260 mg/m <sup>3</sup> |
| Worker DNEL, long-term   |                     | inhalation     | local    | 260 mg/m <sup>3</sup> |
| Worker DNEL, acute       |                     | inhalation     | local    | 260 mg/m <sup>3</sup> |
| Worker DNEL, long-term   |                     | dermal         | systemic | 40 mg/kg bw/day       |
| Worker DNEL, acute       |                     | dermal         | systemic | 40 mg/kg bw/day       |
| Consumer DNEL, long-term |                     | inhalation     | systemic | 50 mg/m <sup>3</sup>  |
| Consumer DNEL, long-term |                     | inhalation     | local    | 50 mg/m <sup>3</sup>  |
| Consumer DNEL, acute     |                     | inhalation     | local    | 50 mg/m <sup>3</sup>  |
| Consumer DNEL, long-term |                     | dermal         | systemic | 8 mg/kg bw/day        |
| Consumer DNEL, acute     |                     | dermal         | systemic | 8 mg/kg bw/day        |
| Consumer DNEL, long-term |                     | oral           | systemic | 8 mg/kg bw/day        |
| Consumer DNEL, acute     |                     | oral           | systemic | 8 mg/kg bw/day        |
| 1310-58-3                | potassium hydroxide |                |          |                       |
| Worker DNEL, long-term   |                     | inhalation     | local    | 1 mg/m <sup>3</sup>   |
| Consumer DNEL, long-term |                     | inhalation     | local    | 1 mg/m <sup>3</sup>   |

#### PNEC values

| CAS No   | Substance | Value     |
|--|-----------|-----------|
| 67-56-1  | methanol  |           |
| Environmental compartment                        |           |           |
| Freshwater                                       |           | 20,8 mg/l |
| Freshwater (intermittent releases)               |           | 1540 mg/l |
| Marine water                                     |           | 2,08 mg/l |
| Freshwater sediment                              |           | 77 mg/kg  |
| Marine sediment                                  |           | 7,7 mg/kg |
| Micro-organisms in sewage treatment plants (STP) |           | 100 mg/l  |
| Soil   |           | 100 mg/kg |

#### 8.2. Exposure controls

##### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Do not breathe vapour/aerosol.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

goggles

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is

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recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) with the following specification (test according to EN 374):

By long-term hand contact

Recommended glove articles KCL 897 Butoject®

Suitable material: Butyl caoutchouc (butyl rubber) 0,3 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles KCL 890 Vitoject®

Suitable material: FKM (fluoro rubber) 0,7 mm

Wearing time with occasional contact (splashes): > 120 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

#### Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

Take off immediately all contaminated clothing and wash it before reuse.

Wear fire resistant or flame retardant clothing.

Wash hands and face before breaks and after work and take a shower if necessary.

Draw up and observe skin protection programme.

#### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### Environmental exposure controls

Do not allow to enter into surface water or drains.

Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

## SECTION 9: Physical and chemical properties

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

|   |                   |                   |
|---|-------------------|-------------------|
| Physical state:   | Liquid            |                   |
| Colour:   | colourless        |                   |
| Odour:  | like: Methanol    |                   |
| Odour threshold:  | No data available |                   |
| Melting point/freezing point:                             |                   | No data available |
| Boiling point or initial boiling point and boiling range: |                   | ~64 °C            |
| Flammability:   |                   | not applicable    |
| Lower explosion limits:                                   |                   | 5,5 vol. %        |
| Upper explosion limits:                                   |                   | 44 vol. %         |
| Flash point:  |                   | ~11 °C            |
| Auto-ignition temperature:                                |                   | 455 °C            |
| Decomposition temperature:                                |                   | not determined    |
| pH-Value:   |                   | alkaline          |
| Viscosity / kinematic:                                    |                   | not determined    |
| Water solubility:   |                   | Soluble in: Water |

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|  |                          |
|--|--------------------------|
| Solubility in other solvents           |                          |
| not determined                         |                          |
| Dissolution rate:                      | No data available        |
| Partition coefficient n-octanol/water: | not determined           |
| Dispersion stability:                  | No data available        |
| Vapour pressure:                       | No data available        |
| Vapour pressure:                       | No data available        |
| Density:                               | 0,8442 g/cm <sup>3</sup> |
| Relative density:                      | No data available        |
| Bulk density:                          | No data available        |
| Relative vapour density:               | not determined           |
| Particle characteristics:              | No data available        |

#### 9.2. Other information

##### Information with regard to physical hazard classes

###### Explosive properties

Vapours can form explosive mixtures with air.

###### Sustaining combustion:

Sustaining combustion

###### Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

###### Oxidizing properties

not determined

##### Other safety characteristics

###### Evaporation rate:

not determined

###### Solvent separation test:

not determined

###### Solvent content:

No data available

###### Solid content:

not determined

###### Sublimation point:

No data available

###### Softening point:

No data available

###### Pour point:

No data available

No data available:

###### Viscosity / dynamic:

No data available

###### Flow time:

not determined

##### Further Information

May be corrosive to metals.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable.

Vapours can form explosive mixtures with air.

May be corrosive to metals.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Oxidising agent, Hydrogen peroxide, Acid halides

Reducing agent, Acid, Alkaline earth metal, Alkali metals

Risk of explosion with: Oxidizing agents, perchloric acid, perchlorates, salts of oxyhalogenic acids, chromium(VI) oxide, halogen oxides, nitrogen oxides, nonmetallic oxides, chromosulfuric acid, chlorates, hydrides, zinc diethyl, halogens, powdered magnesium, hydrogen peroxide, Nitric acid, sulphuric acid, permanganic acid, sodium hypochlorite Exothermic reaction with: acid halides, Acid anhydrides, Reducing



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agents, acids, Bromine, Chlorine, Chloroform, magnesium, tetrachloromethane, CYANURIC CHLORIDE Risk of ignition or formation of inflammable gases or vapours with: Fluorine, Oxides of phosphorus, Raney-nickel  
Generates dangerous gases or fumes in contact with: Alkaline earth metals, Alkali metals

#### 10.4. Conditions to avoid

Vapours can form explosive mixtures with air.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 10.5. Incompatible materials

Plastic articles  
Glass  
metals (including their alloys)

#### 10.6. Hazardous decomposition products

SECTION 5: Firefighting measures

#### Further information

No data available

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

##### Toxicokinetics, metabolism and distribution

Avoid exposure - obtain special instructions before use.

##### Acute toxicity

Toxic if swallowed.  
Toxic in contact with skin.  
Toxic if inhaled.  
If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).  
Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.  
Resorption (oral)  
Resorption (by inhalation)  
Resorption (dermal)

##### ATEmix calculated

ATE (oral) 115,4 mg/kg; ATE (dermal) 354,4 mg/kg; ATE (inhalation vapour) 3,540 mg/l; ATE (inhalation dust/mist) 0,5910 mg/l

| CAS No    | Chemical name           |                 |         |   |  |
|-----------|-------------------------|-----------------|---------|---|--|
|           | Exposure route          | Dose            | Species | Source                                    | Method                                   |
| 67-56-1   | methanol                |                 |         |   |  |
|           | oral                    | LD50 6000 mg/kg | Monkey  | Amer J Ophthalmol 40: 76-83 (cited in DG) | Determination of the acute toxicity of t |
|           | dermal                  | ATE 300 mg/kg   |         |   |  |
|           | inhalation (4 h) vapour | LC50 128,2 mg/l | Rat     | Study report (1980)                       | Study performed according to internal co |
|           | inhalation dust/mist    | ATE 0,5 mg/l    |         |   |  |
| 1310-58-3 | potassium hydroxide     |                 |         |   |  |
|           | oral                    | LD50 333 mg/kg  | Rat     | Fund. Appl. Toxicol., 8, 97-100 (1987)    | OECD Guideline 425                       |

##### Irritation and corrosivity

Causes severe skin burns and eye damage.  
Causes serious eye damage.  
Corneal opacity.

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#### Sensitising effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Causes damage to organs. (methanol)

eyes

Liver and kidney damage

Irreversible damage to the optic nerve.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Information on likely routes of exposure

There are no data available on the mixture itself.

#### Specific effects in experiment on an animal

There are no data available on the mixture itself.

#### Additional information on tests

There are no data available on the mixture itself.

#### Practical experience

There are no data available on the mixture itself.

### 11.2. Information on other hazards

#### Endocrine disrupting properties

There are no data available on the mixture itself.

#### Other information

corrosive, Irritant, Dizziness, Dizziness

Anaesthetic state, Agitation, Spasms

Inebriation, Vomiting, Headache

Impairment of vision, Dyspnoea, Cough

Repeated exposure may cause skin dryness or cracking.

Risk of serious damage to eyes.

Circulatory collapse, Corneal opacity.

#### Further information

Do not empty into drains.

Discharge into the environment must be avoided.

Symptoms may be delayed.

Other dangerous properties can not be excluded.

## SECTION 12: Ecological information

### 12.1. Toxicity

Based on available data, the classification criteria are not met.

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| CAS No  | Chemical name            |               |           |         |                                 |  |
|---------|--------------------------|---------------|-----------|---------|---------------------------------|--|
|         | Aquatic toxicity         | Dose          | [h]   [d] | Species | Source                          | Method   |
| 67-56-1 | methanol                 |               |           |         |                                 |  |
|         | Acute fish toxicity      | LC50<br>mg/l  | 15400     | 96 h    | Lepomis macrochirus             | Bulletin of Environmental Contamination<br>other: EPA-660/3-75-009, 1975     |
|         | Acute algae toxicity     | ErC50<br>mg/l | ca. 22000 | 96 h    | Pseudokirchneriella subcapitata | Ecotoxicology and Environmental Safety 7<br>OECD Guideline 201               |
|         | Acute crustacea toxicity | EC50<br>mg/l  | > 10000   | 48 h    | Daphnia magna                   | Water Research 23(4): 495-499 (1989)<br>other: DIN 38412 Teil 11             |
|         | Fish toxicity            | NOEC<br>mg/l  | 446,7     | 28 d    | Pimephales promelas             | SAR and QSAR in Environmental Research,<br>Calculation performed with ECOSAR |
|         | Crustacea toxicity       | NOEC          | 208 mg/l  | 21 d    | Daphnia magna                   | OECD QSAR Toolbox Report (2013)<br>Toxicity of the target chemical is predi  |

#### 12.2. Persistence and degradability

There are no data available on the mixture itself.

#### 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

#### Partition coefficient n-octanol/water

| CAS No  | Chemical name | Log Pow |
|---------|---------------|---------|
| 67-56-1 | methanol      | -0,77   |

#### BCF

| CAS No  | Chemical name | BCF | Species         | Source               |
|---------|---------------|-----|-----------------|----------------------|
| 67-56-1 | methanol      | 1   | Cyprinus carpio | Comparative Biochemi |

#### 12.4. Mobility in soil

There are no data available on the mixture itself.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

There are no data available on the mixture itself.

#### Further information

Do not allow to enter into surface water or drains.  
Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
Send to a physico-chemical treatment facility under observation of official regulations.  
Do not allow to enter into surface water or drains.

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**Contaminated packaging**

This material and its container must be disposed of as hazardous waste.

Handle contaminated packages in the same way as the substance itself.

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

**SECTION 14: Transport information****Land transport (ADR/RID)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | UN 3286  |
| <b>14.2. UN proper shipping name:</b>    | FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (methanol, potassium hydroxide) |
| <b>14.3. Transport hazard class(es):</b> | 3  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 3+6.1+8  |
| Classification code:                     | FTC  |
| Special Provisions:                      | 274  |
| Limited quantity:                        | 1 L  |
| Excepted quantity:                       | E2   |
| Transport category:                      | 2  |
| Hazard No:                               | 368  |
| Tunnel restriction code:                 | D/E  |

**Inland waterways transport (ADN)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | UN 3286  |
| <b>14.2. UN proper shipping name:</b>    | FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (methanol, potassium hydroxide) |
| <b>14.3. Transport hazard class(es):</b> | 3  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 3+6.1+8  |
| Classification code:                     | FTC  |
| Special Provisions:                      | 274 802  |
| Limited quantity:                        | 1 L  |
| Excepted quantity:                       | E2   |

**Marine transport (IMDG)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | UN 3286  |
| <b>14.2. UN proper shipping name:</b>    | FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (methanol, potassium hydroxide) |
| <b>14.3. Transport hazard class(es):</b> | 3  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 3+6.1/8  |
| Special Provisions:                      | 274  |
| Limited quantity:                        | 1 L  |
| Excepted quantity:                       | E2   |
| EmS:                                     | F-E, S-C   |

**Air transport (ICAO-TI/IATA-DGR)**

|  |  |
|--|--|
| <b>14.1. UN number or ID number:</b>     | UN 3286  |
| <b>14.2. UN proper shipping name:</b>    | FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (methanol, potassium hydroxide) |
| <b>14.3. Transport hazard class(es):</b> | 3  |
| <b>14.4. Packing group:</b>              | II   |
| Hazard label:                            | 3+6.1 8  |
| Limited quantity Passenger:              | 0.5 L  |
| Passenger LQ:                            | Y340   |
| Excepted quantity:                       | E2   |

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|  |     |
|--|-----|
| IATA-packing instructions - Passenger: | 352 |
| IATA-max. quantity - Passenger:        | 1 L |
| IATA-packing instructions - Cargo:     | 363 |
| IATA-max. quantity - Cargo:            | 5 L |

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

Warning: Combustible liquid. Toxic.

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

not applicable

### SECTION 15: Regulatory information

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

##### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 69, Entry 75

Information according to Directive 2012/18/EU (SEVESO III): H2 ACUTE TOXIC

Additional information: P5c

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

Skin resorption/Sensitization: Permeates easily through outer skin and causes poisoning.

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 1,9.

#### Abbreviations and acronyms

Met. Corr: Corrosive to metals

Flam. Liq: Flammable liquids

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Eye Dam: Eye damage

STOT SE: Specific target organ toxicity - single exposure

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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#### Classification for mixtures and used evaluation method according to GB CLP Regulation

| Classification      | Classification procedure |
|---------------------|--------------------------|
| Met. Corr. 1; H290  | On basis of test data    |
| Flam. Liq. 2; H225  | On basis of test data    |
| Acute Tox. 3; H301  | Calculation method       |
| Acute Tox. 3; H311  | Calculation method       |
| Acute Tox. 3; H331  | Calculation method       |
| Skin Corr. 1B; H314 |                          |
| Eye Dam. 1; H318    | Calculation method       |
| STOT SE 1; H370     | Calculation method       |

#### Relevant H and EUH statements (number and full text)

|                |   |
|----------------|---|
| H225           | Highly flammable liquid and vapour.                     |
| H290           | May be corrosive to metals.                             |
| H301           | Toxic if swallowed.                                     |
| H301+H311+H331 | Toxic if swallowed, in contact with skin or if inhaled. |
| H302           | Harmful if swallowed.                                   |
| H311           | Toxic in contact with skin.                             |
| H314           | Causes severe skin burns and eye damage.                |
| H318           | Causes serious eye damage.                              |
| H331           | Toxic if inhaled.                                       |
| H370           | Causes damage to organs.                                |

#### Further Information

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*