

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 1 of 17

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

### 1.1. Product identifier

Solvent mixture for the coul. determ. of the bromine number

UFI: C1Y3-H3MD-C00C-HTH3

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

#### Use of the substance/mixture

Reagents and laboratory chemicals

Only for laboratory and analysis purposes.

#### Uses advised against

Do not use for private purposes (household).

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

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

Company name: AnalytiChem Services, Unipessoal, Lda  
 Street: Rua de Júlio Dinis 676 7º  
 Place: P-4050-320 Porto  
 Telephone: +351 226002917  
 E-mail: info@analytichem.com  
 Contact person: SDS service department  
 E-mail: SDS@analytichem.com  
 Internet: www.analytichem.com  
 Responsible Department: SDS service department

#### Supplier or manufacturer details

Company name: AnalytiChem GmbH  
 Street: Stempelstraße 6  
 Place: D-47167 Duisburg  
 Telephone: 0203/5194-0  
 E-mail: info@analytichem.de  
 Contact person: SDS service department  
 E-mail: SDS@analytichem.com  
 Internet: www.analytichem.de  
 Responsible Department: AnalytiChem:  
 EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20  
 EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200  
 EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848  
 UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500  
 USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378  
 Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701  
 Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333  
 +353 1 901 4670 (CHEMTREC)

### 1.4. Emergency telephone number:

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 2 of 17

## Further Information

This product is a mixture. REACH Registration Number see section 3.

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Flam. Liq. 2; H225  
Met. Corr. 1; H290  
Acute Tox. 4; H332  
Acute Tox. 4; H312  
Acute Tox. 4; H302  
Skin Corr. 1B; H314  
Eye Dam. 1; H318  
STOT SE 1; H370

Full text of hazard statements: see SECTION 16.

## 2.2. Label elements

## Regulation (EC) No 1272/2008

## Hazard components for labelling

acetic acid  
methanol

## Signal word:

Danger

## Pictograms:



## Hazard statements

|                |   |
|----------------|---|
| H225           | Highly flammable liquid and vapour.                       |
| H290           | May be corrosive to metals.                               |
| H302+H312+H332 | Harmful if swallowed, in contact with skin or if inhaled. |
| H314           | Causes severe skin burns and eye damage.                  |
| H370           | Causes damage to organs.                                  |

## Precautionary statements

|                |  |
|----------------|--|
| P260           | Do not breathe mist/vapours/spray.   |
| P280           | Wear protective gloves/protective clothing and eye protection/face protection.   |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310           | Immediately call a POISON CENTER/doctor.   |

## 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

## 3.2. Mixtures

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 3 of 17

## Relevant ingredients

| CAS No    | Chemical name   |              |                  | Quantity    |
|-----------|---|--------------|------------------|-------------|
|           | EC No   | Index No     | REACH No         |             |
|           | Classification (Regulation (EC) No 1272/2008)   |              |                  |             |
| 64-19-7   | acetic acid   |              |                  | 60 - < 65 % |
|           | 200-580-7   | 607-002-00-6 | 01-2119475328-30 |             |
|           | Flam. Liq. 3, Skin Corr. 1A, Eye Dam. 1; H226 H314 H318                                     |              |                  |             |
| 67-56-1   | methanol  |              |                  | 20 - < 25 % |
|           | 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 |              |                  |             |
| 7758-02-3 | potassium bromide   |              |                  | 1 - < 5 %   |
|           | 231-830-3   |              | 01-2119962195-33 |             |
|           | Eye Irrit. 2; H319  |              |                  |             |

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   |             |
| 64-19-7   | 200-580-7 | acetic acid  | 60 - < 65 % |
|           |           | oral: LD50 = 3310 mg/kg Skin Corr. 1A; H314: >= 90 - 100 Skin Corr. 1B; H314: >= 25 - < 90<br>Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25                                       |             |
| 67-56-1   | 200-659-6 | methanol   | 20 - < 25 % |
|           |           | inhalation: LC50 = 128,2 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal:<br>ATE = 300 mg/kg; oral: LD50 = 6000 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371:<br>>= 3 - < 10 |             |
| 7758-02-3 | 231-830-3 | potassium bromide  | 1 - < 5 %   |
|           |           | dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg   |             |

## 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!

Call a physician immediately.

## 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

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Solvent mixture for the coul. determ. of the bromine number**

Revision: 23.09.2025

Product code: AC11.00870

Page 4 of 17

Protect uninjured eye.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

Observe risk of aspiration if vomiting occurs.

Call a physician immediately.

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

corrosive

Irritant

Cough

Dyspnoea

Respiratory complaints

Dizziness

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

No data available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

no restriction

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

Combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Carbon monoxide

Carbon dioxide

Carbon monoxide

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

**5.3. Advice for firefighters**

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

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

Avoid contact with skin, eyes and clothes.

**Additional information**

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

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

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

**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.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Solvent mixture for the coul. determ. of the bromine number**

Revision: 23.09.2025

Product code: AC11.00870

Page 5 of 17

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 to enter into surface water or drains.

**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

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Use extractor hood (laboratory).  
Read label before use. Handle and open container with care.  
When using do not eat, drink, smoke, sniff. Use personal protection equipment.  
Provide adequate ventilation. Avoid contact with skin, eyes and clothes.  
Do not breathe vapour/aerosol.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.  
In case of warming: Vapours are heavier than air, spread along floors and form explosive mixtures with air.

**Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs. 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. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

**Further information on handling**

Draw up and observe skin protection programme.  
Wash hands and face before breaks and after work and take a shower if necessary.  
Take off immediately all contaminated clothing and wash it before reuse.

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 6 of 17

**Requirements for storage rooms and vessels**

Store in a well-ventilated place. Keep container tightly closed.

Corrosive to metals.

**Hints on joint storage**

national regulations

**Further information on storage conditions**

Keep cool. Protect from sunlight.

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

Laboratory chemicals

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

| CAS No  | Substance      | ppm | mg/m <sup>3</sup> | fib/cm <sup>3</sup> | Category      | Origin |
|---------|----------------|-----|-------------------|---------------------|---------------|--------|
| 64-19-7 | Acetic acid    | 10  | 25                |                     | TWA (8 h)     |        |
|         |                | 20  | 50                |                     | STEL (15 min) |        |
| 67-56-1 | Methyl alcohol | 200 | 260               |                     | TWA (8 h)     |        |

**Biological limit values**

| CAS No  | Substance | Parameter | Value   | Test material | Sampling time |
|---------|-----------|-----------|---------|---------------|---------------|
| 67-56-1 | Methanol  | Methanol  | 15 mg/L | Urine         | End of shift  |

**Solvent mixture for the coul. determ. of the bromine number**

Revision: 23.09.2025

Product code: AC11.00870

Page 7 of 17

**DNEL/DMEL values**

| CAS No                   | Substance         |                |          |                        |
|--------------------------|-------------------|----------------|----------|------------------------|
| DNEL type                |                   | Exposure route | Effect   | Value                  |
| 64-19-7                  | acetic acid       |                |          |                        |
| Worker DNEL, long-term   |                   | inhalation     | local    | 25 mg/m <sup>3</sup>   |
| Worker DNEL, acute       |                   | inhalation     | local    | 25 mg/m <sup>3</sup>   |
| Consumer DNEL, long-term |                   | inhalation     | local    | 25 mg/m <sup>3</sup>   |
| Consumer DNEL, acute     |                   | inhalation     | local    | 25 mg/m <sup>3</sup>   |
| 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         |
| 7758-02-3                | potassium bromide |                |          |                        |
| Worker DNEL, long-term   |                   | inhalation     | systemic | 4,75 mg/m <sup>3</sup> |
| Worker DNEL, long-term   |                   | dermal         | systemic | 95 mg/kg bw/day        |
| Worker DNEL, acute       |                   | dermal         | systemic | 95 mg/kg bw/day        |
| Consumer DNEL, long-term |                   | inhalation     | systemic | 1,66 mg/m <sup>3</sup> |
| Consumer DNEL, long-term |                   | dermal         | systemic | 95 mg/kg bw/day        |
| Consumer DNEL, acute     |                   | dermal         | systemic | 95 mg/kg bw/day        |
| Consumer DNEL, long-term |                   | oral           | systemic | 0,475 mg/kg bw/day     |
| Consumer DNEL, acute     |                   | oral           | systemic | 50 mg/kg bw/day        |

**Solvent mixture for the coul. determ. of the bromine number**

Revision: 23.09.2025

Product code: AC11.00870

Page 8 of 17

**PNEC values**

| CAS No   | Substance         |             |
|--|-------------------|-------------|
| Environmental compartment                        |                   | Value       |
| 64-19-7  | acetic acid       |             |
| Freshwater                                       |                   | 3,058 mg/l  |
| Freshwater (intermittent releases)               |                   | 30,58 mg/l  |
| Marine water                                     |                   | 0,306 mg/l  |
| Freshwater sediment                              |                   | 11,36 mg/kg |
| Marine sediment                                  |                   | 1,136 mg/kg |
| Micro-organisms in sewage treatment plants (STP) |                   | 85 mg/l     |
| Soil   |                   | 0,47 mg/kg  |
| 67-56-1  | methanol          |             |
| 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   |
| 7758-02-3  | potassium bromide |             |
| Freshwater                                       |                   | 0,52 mg/l   |
| Freshwater (intermittent releases)               |                   | 109 mg/l    |
| Marine water                                     |                   | 41 mg/l     |
| Micro-organisms in sewage treatment plants (STP) |                   | 100 mg/l    |
| Soil   |                   | 3,2 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.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

goggles

Wear eye/face protection.

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

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact:

Trade name/designation: KCL 898 Butoject®



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Solvent mixture for the coul. determ. of the bromine number**

Revision: 23.09.2025

Product code: AC11.00870

Page 9 of 17

Recommended material: Butyl caoutchouc (butyl rubber) 0,7 mm

Wearing time with permanent contact &gt; 480 min

By short-term hand contact

Trade name/designation: KCL 890 Vitoject®

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

Wearing time with occasional contact (splashes): &gt; 115 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**

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

**Respiratory protection**

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

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Thermal hazards**

No data available

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

|   |                   |                   |
|---|-------------------|-------------------|
| Physical state:   | Liquid            |                   |
| Colour:   | colourless        |                   |
| Odour:  | characteristic    |                   |
| Odour threshold:  | No data available |                   |
| Melting point/freezing point:                             |                   | No data available |
| Boiling point or initial boiling point and boiling range: |                   | No data available |
| Flammability:   |                   | No data available |
| Lower explosion limits:                                   |                   | No data available |
| Upper explosion limits:                                   |                   | No data available |
| Flash point:  |                   | <23 °C            |
| Auto-ignition temperature:                                |                   | No data available |
| Decomposition temperature:                                |                   | No data available |
| pH-Value:   |                   | No data available |
| Viscosity / kinematic:                                    |                   | No data available |
| Water solubility:   |                   | No data available |
| Solubility in other solvents                              |                   |                   |
| No data available   |                   |                   |
| Dissolution rate:   |                   | No data available |
| Partition coefficient n-octanol/water:                    |                   | No data available |

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 10 of 17

|                           |                         |
|---------------------------|-------------------------|
| Dispersion stability:     | No data available       |
| Vapour pressure:          | No data available       |
| Vapour pressure:          | No data available       |
| Density:                  | ~0,98 g/cm <sup>3</sup> |
| Relative density:         | No data available       |
| Bulk density:             | No data available       |
| Relative vapour density:  | No data available       |
| Particle characteristics: | No data available       |

**9.2. Other information****Information with regard to physical hazard classes**

## Explosive properties

In case of warming: Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Sustained combustibility: No data available

## Self-ignition temperature

Solid: No data available

Gas: No data available

## Oxidizing properties

No data available

**Other safety characteristics**

Evaporation rate: No data available

Solvent separation test: No data available

Solvent content: No data available

Solid content: No data available

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: No data available

**Further Information**

Corrosive to metals.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

In case of warming: Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Corrosive to metals.

**10.2. Chemical stability**

Protect against:

Heat

**10.3. Possibility of hazardous reactions**

Ammonia (NH<sub>3</sub>), Amines, Nitrogen oxides (NO<sub>x</sub>), Alkali (lye), Fluorine, Alkali metals Alkaline earth metal, metals, Powdered metals, Methanol, Light metal, Ketone, Oxidising agent, strong

**10.4. Conditions to avoid**

Protect against:

Heat

**10.5. Incompatible materials**

Rubber articles

plastics

Metal

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 11 of 17

**10.6. Hazardous decomposition products**

In case of fire may be liberated:

SECTION 5: Firefighting measures

**Further information**

No data available

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

Avoid exposure - obtain special instructions before use.

**Acute toxicity**

Harmful if inhaled.

Harmful in contact with skin.

Harmful if swallowed.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

**ATEmix calculated**

ATE (oral) 480,1 mg/kg; ATE (dermal) 1440 mg/kg; ATE (inhalation vapour) 14,40 mg/l; ATE (inhalation dust/mist) 2,400 mg/l

| CAS No    | Chemical name           |                   |         |  |  |
|-----------|-------------------------|-------------------|---------|--|--|
|           | Exposure route          | Dose              | Species | Source                                   | Method                                   |
| 64-19-7   | acetic acid             |                   |         |  |  |
|           | oral                    | LD50 3310 mg/kg   | Rat     | J Ind Hyg Toxicol, Vol 23, PP 78-82 (194 | The sodium salt of acetic acid was admin |
| 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      |         |  |  |
| 7758-02-3 | potassium bromide       |                   |         |  |  |
|           | oral                    | LD50 > 5000 mg/kg | Rat     | Study report (1992)                      | EPA OPP 81-1                             |
|           | dermal                  | LD50 > 2000 mg/kg | Rabbit  | Study report (1988)                      | other: EPA FIFRA 81-6                    |

**Irritation and corrosivity**

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Solvent mixture for the coul. determ. of the bromine number**

Revision: 23.09.2025

Product code: AC11.00870

Page 12 of 17

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

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

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

**STOT-single exposure**

Causes damage to organs. (methanol)

**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.

Observe risk of aspiration if vomiting occurs. (Pulmonary oedema Pneumonia)

**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**

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

**Other information**

There are no data available on the mixture itself.

**Further information**

corrosive

Irritant

Cough

Dyspnoea

Respiratory complaints

Dizziness

**SECTION 12: Ecological information****12.1. Toxicity**

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

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 13 of 17

| CAS No    | Chemical name            |                      |           |   |  |  |
|-----------|--------------------------|----------------------|-----------|---|--|--|
|           | Aquatic toxicity         | Dose                 | [h]   [d] | Species   | Source                                   | Method                                   |
| 64-19-7   | acetic acid              |                      |           |   |  |  |
|           | Acute fish toxicity      | LC50 > 1000 mg/l     | 96 h      | Oncorhynchus mykiss                                 | Study report (2005)                      | other: SOP E257                          |
|           | Acute algae toxicity     | ErC50 > 1000 mg/l    | 72 h      | Skeletonema costatum                                | Study report (2005)                      | ISO 10253                                |
|           | Acute crustacea toxicity | EC50 > 1000 mg/l     | 48 h      | Daphnia magna                                       | Study report (1990)                      | OECD Guideline 202                       |
| 67-56-1   | methanol                 |                      |           |   |  |  |
|           | Acute fish toxicity      | LC50 15400 mg/l      | 96 h      | Lepomis macrochirus                                 | Bulletin of Environmental Contamination  | other: EPA-660/3-75-00 9, 1975           |
|           | Acute algae toxicity     | ErC50 ca. 22000 mg/l | 96 h      | Pseudokirchneriella subcapitata                     | Ecotoxicology and Environmental Safety 7 | OECD Guideline 201                       |
|           | Acute crustacea toxicity | EC50 > 10000 mg/l    | 48 h      | Daphnia magna                                       | Water Research 23(4): 495-499 (1989)     | other: DIN 38412 Teil 11                 |
|           | Fish toxicity            | NOEC 446,7 mg/l      | 28 d      | Pimephales promelas                                 | SAR and QSAR in Environmental Research,  | Calculation performed with ECOSAR        |
|           | Crustacea toxicity       | NOEC 208 mg/l        | 21 d      | Daphnia magna                                       | OECD QSAR Toolbox Report (2013)          | Toxicity of the target chemical is predi |
| 7758-02-3 | potassium bromide        |                      |           |   |  |  |
|           | Acute fish toxicity      | LC50 > 440 mg/l      | 96 h      | Scophthalmus maximus                                | Study report (2000)                      | OECD Guideline 203                       |
|           | Acute algae toxicity     | ErC50 > 440 mg/l     | 72 h      | Skeletonema costatum                                | Study report (2000)                      | OECD Guideline 201                       |
|           | Acute crustacea toxicity | EC50 > 100 mg/l      | 48 h      | Daphnia magna                                       | Study report (1996)                      | OECD Guideline 202                       |
|           | Fish toxicity            | NOEC 10 mg/l         | 124 d     | Poecilia reticulata                                 | Fd. Chem. Toxic. Vol. 21, No. 4, 369-378 | Dutch Standardisation Organisation       |
|           | Crustacea toxicity       | NOEC 7,5 mg/l        | 21 d      | Daphnia magna                                       | Ecotoxicology and Environmental Safety,  | other: OECD                              |
|           | Acute bacteria toxicity  | EC50 > 1000 mg/l ( ) | 3 h       | activated sludge of a predominantly domestic sewage | Study report (2007)                      | OECD Guideline 209                       |

## 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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 14 of 17

## Partition coefficient n-octanol/water

| CAS No  | Chemical name | Log Pow |
|---------|---------------|---------|
| 64-19-7 | acetic acid   | -0,17   |
| 67-56-1 | methanol      | -0,77   |

## BCF

| CAS No    | Chemical name     | BCF  | Species         | Source                |
|-----------|-------------------|------|-----------------|-----------------------|
| 64-19-7   | acetic acid       | 3,16 | fish            | Environ. Toxicol. Ch  |
| 67-56-1   | methanol          | 1    | Cyprinus carpio | Comparative Biochemi  |
| 7758-02-3 | potassium bromide | 0,23 | Artemia salina  | Environmental Toxicol |

## 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 REACH, annex XIII.

## 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

Discharge into the environment must be avoided.

## Further information

Do not allow to enter into surface water or drains.

## 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 empty into drains.

## Contaminated packaging

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.

Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

## SECTION 14: Transport information

## Land transport (ADR/RID)

|                                   |   |
|-----------------------------------|---|
| 14.1. UN number or ID number:     | UN 2924   |
| 14.2. UN proper shipping name:    | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (acetic acid, methanol) |
| 14.3. Transport hazard class(es): | 3   |
| 14.4. Packing group:              | II  |
| Hazard label:                     | 3+8   |
| Classification code:              | FC  |
| Special Provisions:               | 274   |
| Limited quantity:                 | 1 L   |
| Excepted quantity:                | E2  |
| Transport category:               | 2   |
| Hazard No:                        | 338   |
| Tunnel restriction code:          | D/E   |

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 15 of 17

## Inland waterways transport (ADN)

|  |   |
|--|---|
| <b>14.1. UN number or ID number:</b>     | UN 2924   |
| <b>14.2. UN proper shipping name:</b>    | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (acetic acid, methanol) |
| <b>14.3. Transport hazard class(es):</b> | 3   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 3+8   |
| Classification code:                     | FC  |
| Special Provisions:                      | 274   |
| Limited quantity:                        | 1 L   |
| Excepted quantity:                       | E2  |

## Marine transport (IMDG)

|  |   |
|--|---|
| <b>14.1. UN number or ID number:</b>     | UN 2924   |
| <b>14.2. UN proper shipping name:</b>    | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (acetic acid, methanol) |
| <b>14.3. Transport hazard class(es):</b> | 3   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 3+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 2924   |
| <b>14.2. UN proper shipping name:</b>    | FLAMMABLE LIQUID, CORROSIVE, N.O.S. (acetic acid, methanol) |
| <b>14.3. Transport hazard class(es):</b> | 3   |
| <b>14.4. Packing group:</b>              | II  |
| Hazard label:                            | 3+8   |
| Special Provisions:                      | A3  |
| Limited quantity Passenger:              | 0.5 L   |
| Passenger LQ:                            | Y340  |
| Excepted quantity:                       | E2  |
| 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

## 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):

H3 STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

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.

**Solvent mixture for the coul. determ. of the bromine number**

Revision: 23.09.2025

Product code: AC11.00870

Page 16 of 17

Water hazard class (D):

2 - obviously hazardous to water

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 1,2,5,8,9,11,14.

**Abbreviations and acronyms**

Met. Corr. 1: Corrosive to metals, hazard category 1

Flam. Liq. 2: Flammable liquids, hazard category 2

Acute Tox. 3: Acute toxicity, hazard category 3

Skin Corr. 1A: Skin corrosion, sub-category 1A

Eye Dam. 1: Serious eye damage, hazard category 1

Eye Irrit. 2: Eye irritation, hazard category 2

STOT SE 1: Specific target organ toxicity - single exposure, hazard category 1

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

| Classification      | Classification procedure |
|---------------------|--------------------------|
| Flam. Liq. 2; H225  | On basis of test data    |
| Met. Corr. 1; H290  | On basis of test data    |
| Acute Tox. 4; H332  | Calculation method       |
| Acute Tox. 4; H312  | Calculation method       |
| Acute Tox. 4; H302  | Calculation method       |
| Skin Corr. 1B; H314 | Calculation method       |
| 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.                       |
| H226           | Flammable liquid and vapour.                              |
| H290           | May be corrosive to metals.                               |
| H301           | Toxic if swallowed.                                       |
| H302           | Harmful if swallowed.                                     |
| H302+H312+H332 | Harmful if swallowed, in contact with skin or if inhaled. |
| H311           | Toxic in contact with skin.                               |
| H312           | Harmful in contact with skin.                             |
| H314           | Causes severe skin burns and eye damage.                  |
| H318           | Causes serious eye damage.                                |
| H319           | Causes serious eye irritation.                            |
| H331           | Toxic if inhaled.   |
| H332           | Harmful if inhaled.                                       |
| H370           | Causes damage to organs (eyes, central nervous system).   |
| H370           | Causes damage to organs.                                  |

**Further Information**

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. Provide appropriate information, instructions and training to users



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Solvent mixture for the coul. determ. of the bromine number

Revision: 23.09.2025

Product code: AC11.00870

Page 17 of 17

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