

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

Revision date: 02.05.2023

Product code: 33348

Page 1 of 9

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

##### 1.1. Product identifier

Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

##### 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                 |                              |
| 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

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

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

##### 2.2. Label elements

###### Regulation (EC) No 1272/2008

###### Special labelling of certain mixtures

|        |  |
|--------|--|
| EUH208 | Contains hydroxylammonium chloride. May produce an allergic reaction.        |
| EUH210 | Safety data sheet available on request.<br>Restricted to professional users. |

##### 2.3. Other hazards

No data available

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

##### 3.2. Mixtures

###### Chemical characterization

Mixtures in aqueous solution

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie**

Revision date: 02.05.2023

Product code: 33348

Page 2 of 9

**Hazardous components**

| CAS No    | Chemical name  |              |                  | Quantity |
|-----------|--|--------------|------------------|----------|
|           | EC No  | Index No     | REACH No         |          |
|           | Classification (Regulation (EC) No 1272/2008)  |              |                  |          |
| 5470-11-1 | hydroxylammonium chloride  |              |                  | < 1 %    |
|           | 226-798-2  | 612-123-00-2 | 01-2120766309-45 |          |
|           | Met. Corr. 1, Carc. 2, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT RE 2, Aquatic Acute 1; H290 H351 H312 H302 H315 H319 H317 H373 H400 |              |                  |          |

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 |          |
| 5470-11-1 | 226-798-2                                       | hydroxylammonium chloride                | < 1 %    |
|           | dermal: ATE = 1100 mg/kg; oral: ATE = 500 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**

No data available

**After inhalation**

Provide fresh air.  
Call a doctor if you feel unwell.

**After contact with skin**

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.  
In case of skin irritation, consult a physician.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.  
In case of eye irritation consult an ophthalmologist.  
Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**

Rinse mouth immediately and drink plenty of water.  
Call a physician immediately.

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

Allergic reactions

**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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

Revision date: 02.05.2023

Product code: 33348

Page 3 of 9

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

Non-combustible liquids  
Hazardous combustion products  
In case of fire may be liberated:  
Nitrogen oxides (NO<sub>x</sub>)  
Hydrogen chloride (HCl)

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

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

#### **Additional information**

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**

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

Provide adequate ventilation.  
Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Remove persons to safety.  
Emergency procedures  
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**

Read label before use.  
Handle and open container with care.  
Do not breathe vapour/aerosol.

##### **Advice on protection against fire and explosion**

Usual measures for fire prevention.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

Revision date: 02.05.2023

Product code: 33348

Page 4 of 9

#### 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

##### Requirements for storage rooms and vessels

Keep container tightly closed.

##### Further information on storage conditions

Keep container dry.

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

Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 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

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

Recommended glove articles: KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles: KCL 741 Dermatril® L

Recommended material: NBR (Nitrile rubber) 0,11mm

Wearing time with occasional contact (splashes): > 480 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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

Revision date: 02.05.2023

Product code: 33348

Page 5 of 9

#### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

#### 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:  | odourless         |                           |
| 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:  |                   | No data available         |
| Auto-ignition temperature:                                |                   | No data available         |
| Decomposition temperature:                                |                   | No data available         |
| pH-Value:   |                   | 3,4                       |
| Viscosity / kinematic:                                    |                   | No data available         |
| Water solubility:   |                   | completely miscible       |
| Solubility in other solvents:                             |                   | No data available         |
| Partition coefficient n-octanol/water:                    |                   | No data available         |
| Vapour pressure:  |                   | No data available         |
| Vapour pressure:  |                   | No data available         |
| Density (at 20 °C):                                       |                   | 1,00268 g/cm <sup>3</sup> |
| Bulk density:   |                   | No data available         |
| Relative vapour density:                                  |                   | No data available         |

### 9.2. Other information

#### Information with regard to physical hazard classes

|                           |                   |
|---------------------------|-------------------|
| Explosive properties      |                   |
| No data available         |                   |
| Sustaining combustion:    | No data available |
| Self-ignition temperature |                   |
| Solid:                    | No data available |
| Gas:                      | No data available |
| Oxidizing properties      |                   |
| Oxidizing                 |                   |

#### Other safety characteristics

|                          |                   |
|--------------------------|-------------------|
| Evaporation rate:        | No data available |
| Solvent separation test: | No data available |
| Solvent content:         | 0                 |
| Solid content:           | 0                 |
| Sublimation point:       | No data available |
| Softening point:         | No data available |
| Pour point:              | No data available |
| No data available:       |                   |
| Viscosity / dynamic:     | No data available |

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie**

Revision date: 02.05.2023

Product code: 33348

Page 6 of 9

Flow time:

No data available

**Further Information**

No data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No data available

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

No data available

**10.5. Incompatible materials**

No data available

**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**

There are no data available on the preparation/mixture itself.

**Acute toxicity**

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

| CAS No    | Chemical name             |                   |         |        |        |
|-----------|---------------------------|-------------------|---------|--------|--------|
|           | Exposure route            | Dose              | Species | Source | Method |
| 5470-11-1 | hydroxylammonium chloride |                   |         |        |        |
|           | oral                      | ATE 500<br>mg/kg  |         |        |        |
|           | dermal                    | ATE 1100<br>mg/kg |         |        |        |

**Irritation and corrosivity**

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

**Sensitising effects**

Contains hydroxylammonium chloride. May produce an allergic reaction.

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

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

**STOT-single exposure**

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

**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.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

Revision date: 02.05.2023

Product code: 33348

Page 7 of 9

#### Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

#### Additional information on tests

There are no data available on the preparation/mixture itself.

#### Practical experience

There are no data available on the preparation/mixture itself.

#### 11.2. Information on other hazards

##### Other information

There are no data available on the preparation/mixture itself.

##### Further information

There are no data available on the preparation/mixture itself.

### SECTION 12: Ecological information

#### 12.1. Toxicity

There are no data available on the mixture itself.

#### 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.

#### 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.

There are no data available on the mixture itself.

#### 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.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

##### 14.1. UN number or ID number:

No dangerous good in sense of this transport regulation.

##### 14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

##### 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

Revision date: 02.05.2023

Product code: 33348

Page 8 of 9

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Inland waterways transport (ADN)

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

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

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

### 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 75

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

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

### SECTION 16: Other information

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

|        |   |
|--------|---|
| H290   | May be corrosive to metals.   |
| H302   | Harmful if swallowed.   |
| H312   | Harmful in contact with skin.   |
| H315   | Causes skin irritation.   |
| H317   | May cause an allergic skin reaction.                                  |
| H319   | Causes serious eye irritation.  |
| H351   | Suspected of causing cancer.  |
| H373   | May cause damage to organs through prolonged or repeated exposure.    |
| H400   | Very toxic to aquatic life.   |
| EUH208 | Contains hydroxylammonium chloride. May produce an allergic reaction. |
| EUH210 | Safety data sheet available on request.                               |

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Reduktions-Reagenzlösung zur photometrischen Mangan-Bestimmung EZ2303-Serie

Revision date: 02.05.2023

Product code: 33348

Page 9 of 9

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