

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 1 of 9

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

## 1.1. Product identifier

"Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

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

#### Use of the substance/mixture

Laboratory chemical

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). No data available

#### 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 For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> 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

#### 2.3. Other hazards

No information 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

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 2 of 9

# Relevant ingredients

| CAS No    | Chemical name                                 |              |                  |         |
|-----------|---|--------------|------------------|---------|
|           | EC No   | Index No     | REACH No         |         |
|           | Classification (Regulation (EC) No 1272/2008) |              |                  |         |
| 1310-73-2 | sodium hydroxide                              |              |                  | < 0.1 % |
|           | 215-185-5                                     | 011-002-00-6 | 01-2119457892-27 |         |
|           | Met. Corr. 1, Skin Corr. 1A; H290 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. L   | Specific Conc. Limits, M-factors and ATE |          |  |
| 1310-73-2 | 215-185-5  | sodium hydroxide                         | < 0.1 %  |  |
|           | 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 |  |          |  |

#### **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.

### After contact with skin

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

Wash immediately with: Water

# 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

Irritant

# 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

Non-combustible liquids



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 3 of 9

### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Avoid contact with skin, eyes and clothes.

#### Additional information

Suppress gases/vapours/mists with water spray jet.

### **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

No special environmental measures are necessary.

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

#### 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.

Do not breathe vapour/aerosol.

## Advice on protection against fire and explosion

No special fire protection measures are necessary.

## 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 before breaks and after work.

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

### Requirements for storage rooms and vessels

Keep container tightly closed.

Unsuitable container/equipment material:

Metal



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 4 of 9

Aluminium

Tin

7inc

# Further information on storage conditions

Store in a dry place.

### 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/m³ | fib/cm³ | Category      | Origin |
|-----------|------------------|-----|-------|---------|---------------|--------|
| 1310-73-2 | Sodium hydroxide | -   | 2     |         | STEL (15 min) |        |

#### **DNEL/DMEL values**

| CAS No                   | Substance        |                |        |         |  |  |  |
|--------------------------|------------------|----------------|--------|---------|--|--|--|
| DNEL type                |                  | Exposure route | Effect | Value   |  |  |  |
| 1310-73-2                | sodium hydroxide |                |        |         |  |  |  |
| Worker DNEL, long-term   |                  | inhalation     | local  | 1 mg/m³ |  |  |  |
| Consumer DNEL, long-term |                  | inhalation     | local  | 1 mg/m³ |  |  |  |

### 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

Wear eye/face protection.

Suitable eye 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 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 With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L
Recommended material: NBR (Nitrile rubber) 0,11 mm
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 5 of 9

No data available

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).

#### Skin protection

Wear suitable protective clothing.

### 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

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range: Flammability:

Lower explosion limits:

Upper explosion limits:

No data available

Flash point:

X

Auto-ignition temperature:

No data available

Decomposition temperature:

No data available

PH-Value:

alkaline

Viscosity / kinematic:

No data available

Water solubility:

very soluble

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Vapour pressure:

No data available

Bulk density:

No data available

Relative vapour density:

No data available

# 9.2. Other information

## Information with regard to physical hazard classes

Explosive properties not determined

Sustaining combustion: No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties Not oxidising.

Other safety characteristics

Evaporation rate: No data available



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 6 of 9

Solvent separation test:

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

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

Further Information
Corrosive to metals.

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

### 10.1. Reactivity

Corrosive to metals.

#### 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

Metal

Aluminium

Tin

Zinc

### 10.6. Hazardous decomposition products

No data available

#### **Further information**

No data available

# **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

# Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

## **Acute toxicity**

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

#### ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

### Irritation and corrosivity

Based on available data, the classification criteria are not met. slightly irritant but not relevant for classification.

# 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.



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 7 of 9

### 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.

### 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

#### Other information

There are no data available on the mixture itself.

#### **Further information**

There are no data available on the mixture itself.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

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

| CAS No    | Chemical name            |                |     |           |         |               |  |
|-----------|--------------------------|----------------|-----|-----------|---------|---------------|--|
|           | Aquatic toxicity         | Dose           |     | [h]   [d] | Species | Source        | Method   |
| 1310-73-2 | sodium hydroxide         |                |     |           |         |               |  |
|           | Acute crustacea toxicity | EC50 4<br>mg/l | 0,4 | 48 h      |         | Environmental | other: acute 48-h<br>immobilization<br>test ac |

### 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.

## 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.

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

# 13.1. Waste treatment methods

## **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

## Contaminated packaging

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



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 8 of 9

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.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

Warning: strongly corrosive.

## 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 75

Information according to Directive

2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

**National regulatory information** 

Water hazard class (D): - - non-hazardous to water

## **SECTION 16: Other information**

# Changes

This data sheet contains changes from the previous version in section(s): 12.



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# "Cyanide standard solution 1.0 mg CN-/I ""HIGH"" auxiliary solution for METROHM"

Revision date: 10.11.2023 Product code: 22738 Page 9 of 9

## Abbreviations and acronyms

Met. Corr: Substance or mixture corrosive to metals

Skin Corr: Skin corrosion

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%

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

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

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