

## Safety Data Sheet

according to UK REACH Regulation

### Reagent 130+R2594

Revision date: 22.11.2023

Product code: 130+R2594

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

### 1.1. Product identifier

Reagent 130+R2594

UFI: 0HHC-8RSV-C30V-GEAH

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

#### Use of the substance/mixture

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

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

Laboratory chemicals

#### 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

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

Skin Irrit. 2; H315

Eye Irrit. 2; H319

STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### GB CLP Regulation

#### Hazard components for labelling

Hydrochloric acid

Signal word: Warning

#### Pictograms:



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#### Hazard statements

|      |                                   |
|------|-----------------------------------|
| H290 | May be corrosive to metals.       |
| H315 | Causes skin irritation.           |
| H319 | Causes serious eye irritation.    |
| H335 | May cause respiratory irritation. |

#### Precautionary statements

|                |  |
|----------------|--|
| P280           | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.                                    |
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P390           | Absorb spillage to prevent material damage.  |

#### 2.3. Other hazards

No data available

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Mixtures in aqueous solution

#### Relevant ingredients

| CAS No    | Chemical name                       |              |                  | Quantity    |
|-----------|-------------------------------------|--------------|------------------|-------------|
|           | EC No                               | Index No     | REACH No         |             |
|           | Classification (GB CLP Regulation)  |              |                  |             |
| 7647-01-0 | Hydrochloric acid                   |              |                  | 10 - < 15 % |
|           | 231-595-7                           | 017-002-01-X | 01-2119484862-27 |             |
|           | Skin Corr. 1B, STOT SE 3; H314 H335 |              |                  |             |

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   |                   |             |
| 7647-01-0 | 231-595-7  | Hydrochloric acid | 10 - < 15 % |
|           | Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100 |                   |             |

#### 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

Remove contaminated, saturated clothing immediately.

#### After inhalation

Provide fresh air.  
Call a physician immediately.

#### After contact with skin

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.

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In case of skin irritation, consult a physician.

#### **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.

#### **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 — skin irritation and eye damage

Cough

Dyspnoea

#### **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

Hazardous combustion products

In case of fire may be liberated:

Hydrochloric gas

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

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

Avoid contact with skin, eyes and clothes.

#### **Additional information**

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

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**

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 to enter into surface water or drains.

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

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#### 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

- 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).
- Provide adequate ventilation.
- Avoid contact with skin, eyes and clothes.

#### Advice on protection against fire and explosion

- Usual measures for fire prevention.

#### 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

- 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.
- Provide adequate ventilation as well as local exhaustion at critical locations.
- Keep in a cool place.

#### Hints on joint storage

- national regulations

#### Further information on storage conditions

- Unsuitable container/equipment material: Metal

### 7.3. Specific end use(s)

- Laboratory chemicals

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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#### Exposure limits (EH40)

| CAS No    | Substance                                 | ppm | mg/m <sup>3</sup> | fibres/ml | Category      | Origin |
|-----------|---|-----|-------------------|-----------|---------------|--------|
| 7647-01-0 | Hydrogen chloride (gas and aerosol mists) | 1   | 2                 |           | TWA (8 h)     | WEL    |
|           |   | 5   | 8                 |           | STEL (15 min) | WEL    |

#### DNEL/DMEL values

| CAS No                   | Substance         | Exposure route | Effect | Value                |
|--------------------------|-------------------|----------------|--------|----------------------|
| 7647-01-0                | Hydrochloric acid |                |        |                      |
| Worker DNEL, long-term   |                   | inhalation     | local  | 8 mg/m <sup>3</sup>  |
| Worker DNEL, acute       |                   | inhalation     | local  | 15 mg/m <sup>3</sup> |
| Consumer DNEL, long-term |                   | inhalation     | local  | 8 mg/m <sup>3</sup>  |
| Consumer DNEL, acute     |                   | inhalation     | local  | 15 mg/m <sup>3</sup> |

#### 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 gas/fumes/vapour/spray.

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

##### Eye/face protection

Suitable eye protection:  
Face protection shield  
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.

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

Trade name/designation: KCL 730 Camatril® Velours

Suitable material: 0,4 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 720 Camapren®

Suitable material: CR (polychloroprene, chloroprene rubber) 0,65 mm

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)).

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**Skin protection**

Wear suitable protective clothing.  
Protective clothing acid-resistant

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation  
Filtering device with filter or ventilator filtering device of type: E-(P2)

**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:  | stinging          |                                  |
| 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:   |                   | not applicable<br>not applicable |
| Lower explosion limits:                                   |                   | No data available                |
| Upper explosion limits:                                   |                   | No data available                |
| Flash point:  |                   | X                                |
| Auto-ignition temperature:                                |                   | No data available                |
| Decomposition temperature:                                |                   | No data available                |
| pH-Value (at 20 °C):                                      |                   | 0,4                              |
| Viscosity / kinematic:                                    |                   | No data available                |
| Water solubility:   |                   | easily soluble                   |
| Solubility in other solvents                              |                   | not determined                   |
| Partition coefficient n-octanol/water:                    |                   | No data available                |
| Vapour pressure:  |                   | No data available                |
| Vapour pressure:  |                   | No data available                |
| Density (at 20 °C):                                       |                   | 1,061 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         |                |
| Self-ignition temperature |                |
| Solid:                    | not applicable |
| Gas:                      | not applicable |
| 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 |

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|                      |                   |
|----------------------|-------------------|
| 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

Corrosive to metals.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Amines, permanganates, e.g. potassium permanganate, aldehydes

Ignition hazard: Carbide, Fluorine

Possibility of hazardous reactions: Aluminium, Formaldehyde, Metal, Alkali (lye)

Danger of explosion: Alkali metals, Sulphuric acid, concentrated

### 10.4. Conditions to avoid

Heat

### 10.5. Incompatible materials

Keep away from: Metal.

The product develops hydrogen in an aqueous solution in contact with metals.

### 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 GB CLP Regulation

#### Toxicokinetics, metabolism and distribution

There are no data available on the mixture itself.

#### Acute toxicity

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

Pulmonary oedema

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

#### 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

Causes skin irritation.

Causes serious eye irritation.

#### 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.

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**STOT-single exposure**

May cause respiratory irritation. (Hydrochloric acid)

**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**

Irritant — skin irritation and eye damage

Cough

Dyspnoea

**SECTION 12: Ecological information**

**12.1. Toxicity**

There are no data available on the mixture itself.

| CAS No    | Chemical name       |      |           |         |                |        |
|-----------|---------------------|------|-----------|---------|----------------|--------|
|           | Aquatic toxicity    | Dose | [h]   [d] | Species | Source         | Method |
| 7647-01-0 | Hydrochloric acid   |      |           |         |                |        |
|           | Acute fish toxicity | LC50 | 862 mg/l  | 96 h    | Leuciscus idus |        |

**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 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**

Discharge into the environment must be avoided.

Harmful effect due to pH shift.

Forms corrosive mixtures with water even if diluted.

**Further information**

Do not empty into drains.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**



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**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)**

|  |                   |
|--|-------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1789           |
| <b>14.2. UN proper shipping name:</b>    | HYDROCHLORIC ACID |
| <b>14.3. Transport hazard class(es):</b> | 8                 |
| <b>14.4. Packing group:</b>              | II                |
| Hazard label:                            | 8                 |
| Classification code:                     | C1                |
| Special Provisions:                      | 520               |
| Limited quantity:                        | 1 L               |
| Excepted quantity:                       | E2                |
| Transport category:                      | 2                 |
| Hazard No:                               | 80                |
| Tunnel restriction code:                 | E                 |

**Inland waterways transport (ADN)**

|  |                   |
|--|-------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1789           |
| <b>14.2. UN proper shipping name:</b>    | HYDROCHLORIC ACID |
| <b>14.3. Transport hazard class(es):</b> | 8                 |
| <b>14.4. Packing group:</b>              | II                |
| Hazard label:                            | 8                 |
| Classification code:                     | C1                |
| Special Provisions:                      | 520               |
| Limited quantity:                        | 1 L               |
| Excepted quantity:                       | E2                |

**Marine transport (IMDG)**

|  |                   |
|--|-------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1789           |
| <b>14.2. UN proper shipping name:</b>    | HYDROCHLORIC ACID |
| <b>14.3. Transport hazard class(es):</b> | 8                 |
| <b>14.4. Packing group:</b>              | II                |
| Hazard label:                            | 8                 |
| Special Provisions:                      | -                 |
| Limited quantity:                        | 1 L               |
| Excepted quantity:                       | E2                |
| EmS:                                     | F-A, S-B          |

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

|  |                   |
|--|-------------------|
| <b>14.1. UN number or ID number:</b>     | UN 1789           |
| <b>14.2. UN proper shipping name:</b>    | HYDROCHLORIC ACID |
| <b>14.3. Transport hazard class(es):</b> | 8                 |
| <b>14.4. Packing group:</b>              | II                |
| Hazard label:                            | 8                 |
| Special Provisions:                      | A3 A803           |
| Limited quantity Passenger:              | 0.5 L             |
| Passenger LQ:                            | Y840              |

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|  |    |      |
|--|----|------|
| Excepted quantity:                     | E2 |      |
| IATA-packing instructions - Passenger: |    | 851  |
| IATA-max. quantity - Passenger:        |    | 1 L  |
| IATA-packing instructions - Cargo:     |    | 855  |
| IATA-max. quantity - Cargo:            |    | 30 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

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

##### 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): 1 - slightly hazardous to water

### 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

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Irrit: Eye irritation

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%

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

| Classification      | Classification procedure |
|---------------------|--------------------------|
| Met. Corr. 1; H290  | On basis of test data    |
| Skin Irrit. 2; H315 | Calculation method       |
| Eye Irrit. 2; H319  | Calculation method       |
| STOT SE 3; H335     | Calculation method       |

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

|      |  |
|------|--|
| H290 | May be corrosive to metals.              |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation.                  |
| H319 | Causes serious eye irritation.           |

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H335                      May cause respiratory irritation.

#### 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.

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