

## Pepsin-based electrode cleaner

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

#### 1.1 - Product identifier

Trade name/designation Pepsin-based electrode cleaner

Chemical name

Product-type Mixture

Product code PCE-GCS-500

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

Relevant identified uses - electrode regeneration

Uses advised against - Other

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

PCE Deutschland GmbH

Im Langel 26

59872 Meschede - Deutschland

Phone : +49 (0) 2903 / 976 990 Fax: +49 (0) 2903 / 976 9929

Website [www.pce-instruments.com](http://www.pce-instruments.com)

[info@pce-instruments.com](mailto:info@pce-instruments.com)

#### 1.4 - Emergency telephone number

- Poison Control Center Munich

Tel: +49(0)89 / 19 24 0

Germany

24 hourservice

Languages: German English

please also call from: United Kingdom

### SECTION 2: Hazards identification

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

Classification according to Regulation (EC) No 1272/2008 [CLP]

|               |   |
|---------------|---|
| Resp. Sens. 1 | Sensitisation — Respiratory, category 1 |
| Skin Sens. 1  | Skin sensitization - Category 1         |

#### 2.2 - Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains: Pepsin A (CAS No.: 9001-75-6)

Signal word : Danger

Hazard pictograms



Hazard statements

|      |   |
|------|---|
| H317 | May cause an allergic skin reaction                                       |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |

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### Precautionary statements

|           |  |
|-----------|--|
| P101      | If medical advice is needed, have product container or label at hand.            |
| P102      | Keep out of reach of children.   |
| P103      | Read label before use.   |
| P261      | Avoid breathing mist, vapours, spray.  |
| P272      | Contaminated work clothing should not be allowed out of the workplace.           |
| P280      | Wear protective gloves, protective clothing, eye protection.                     |
| P284      | [In case of inadequate ventilation] wear respiratory protection.                 |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap.                                  |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing.       |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention.                 |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER/doctor/?.             |
| P362+P364 | Take off contaminated clothing and wash it before reuse.                         |
| P501      | Dispose of contents, container to an appropriate recycling or disposal facility. |

### EUH-phrases

|        |  |
|--------|--|
| EUH208 | Contains Pepsin A (9001-75-6) . May produce an allergic reaction |
|--------|--|

### 2.3 - Other hazards

PBT-substance. - No information available.

vPvB-substance. - No information available.

Other hazards which do not result in classification - No information available.

## SECTION 3: Composition / information on ingredients

### 3.1 - Substances

Not applicable

### 3.2 - Mixtures

- in aqueous solution

| Chemical name      | No  | %     | Class   | Spec. concentrations   |
|--------------------|---|-------|---|--|
| Pepsin A           | CAS No. : 9001-75-6<br>Index No. : 647-008-00-6<br>EC No. : 232-629-3   | <= 1  | Eye Irrit. 2 - H319<br>Resp. Sens. 1 - H334<br>Skin Irrit. 2 - H315<br>Skin Sens. 1 - H317<br>STOT SE 3 (H335) - H335 | Not applicable   |
| hydrphchloric acid | CAS No. : 7647-01-0<br>Index No. : 017-002-01-X<br>EC No. : 231-595-7<br>REACH No. :<br>01-2119484862-27-XXXX | < 0,5 | Eye Dam. 1 - H318<br>Met. Corr. 1 - H290<br>Skin Corr. 1B - H314<br>STOT SE 3 (H335) - H335                           | Skin Corr. 1B - H314 :<br>25>=%<=100<br>Skin Irrit. 2 - H315 :<br>10>=%<25<br>Eye Irrit. 2 - H319 :<br>10>=%<25<br>STOT SE 3 (H335) - H335 :<br>10>=%<=100 |

## SECTION 4: First aid measures

### 4.1 - Description of first aid measures

#### Following inhalation

- After inhaling vapours, first symptoms of poisoning may develop hours later, so always consult a doctor.

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- Provide fresh air.
- When in doubt or if symptoms are observed, get medical advice.
- Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

### Following skin contact

- After contact with skin, wash immediately with plenty of water and soap.
- In case of skin reactions, consult a physician.

### After eye contact

- Rinse immediately carefully and thoroughly with eye-bath or water.
- In case of eye irritation consult an ophthalmologist.

### After ingestion

- Rinse mouth thoroughly with water.
- Do NOT induce vomiting.

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

#### Symptoms and effects - Following inhalation

- Symptoms can occur only after several hours.
- Effects Allergic reactions

#### Symptoms and effects - Following skin contact

- Causes skin irritation.

#### Symptoms and effects - After eye contact

- No information available.

#### Symptoms and effects - After ingestion

- No information available.

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

- Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 - Extinguishing media

#### Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO<sub>2</sub>)
- Foam
- Extinguishing powder

#### Unsuitable extinguishing media

- Full water jet

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

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

- No information available.

#### Hazardous decomposition products

- Hydrogen chloride (HCl)
- Carbon dioxide (CO<sub>2</sub>)
- Carbon monoxide

### 5.3 - Advice for firefighters

- Remove product from area of fire.
- Wear a self-contained breathing apparatus and chemical protective clothing.

## SECTION 6: Accidental release measures

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### 6.1 - Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

- Remove persons to safety.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.
- Use personal protection equipment.

#### For emergency responders

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

### 6.2 - Environmental precautions

- No information available.

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

#### Methods and material for containment

- No information available.
- Soak up inert absorbent and dispose as waste requiring special attention.

#### Methods and material for cleaning up

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Take up mechanically, placing in appropriate containers for disposal.
- Clear contaminated areas thoroughly.
- Ventilate affected area.

#### Inappropriate techniques

- No information available.

### 6.4 - Reference to other sections

- Personal protection equipment: see section 8

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## SECTION 7: Handling and storage

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### 7.1 - Precautions for safe handling

#### Recommendation

- After use replace the closing cap immediately.
- Vapours/aerosols must be exhausted directly at the point of origin.
- All work processes must always be designed so that the following is excluded: Inhalation
- See section 8.
- Avoid: Skin contact
- It is recommended to design all work processes always so that the following is excluded: Skin contact

#### Advices on general occupational hygiene

- Work in well-ventilated zones or use proper respiratory protection.

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

- Keep container tightly closed in a cool, well-ventilated place.

### 7.3 - Specific end use(s)

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## SECTION 8: Exposure controls/personal protection

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### 8.1 - Control parameters

| hydrpchloric acid (7647-01-0) |                     |
|-------------------------------|---------------------|
| IOELV TWA mg/m3 (UE)          | 8 mg/m3 2000/39/EG  |
| IOELV TWA ppm (UE)            | 5 ppm 2000/39/EG    |
| IOELV STEL mg/m3 (UE)         | 15 mg/m3 2000/39/EG |
| IOELV STEL ppm (UE)           | 10 ppm 2000/39/EG   |

### 8.2 - Exposure controls

Appropriate engineering controls

- No information available.

Individual protection measures, such as personal protective equipment

- Suitable protective clothing: lab coat

- Suitable eye protection: Eye glasses with side protection

- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

- Suitable material: NBR (Nitrile rubber)

- Barrier creams are not substitutes for body protection.



## SECTION 9: Physical and chemical properties

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

| <u>Physical state</u> | Liquid       | <u>Appearance</u> | Liquid         |
|-----------------------|--------------|-------------------|----------------|
| <u>Colour</u>         | light yellow | <u>Odour</u>      | characteristic |
| Odour threshold       |              | No data available |                |
| pH                    |              | No data available |                |
| Melting point         |              | No data available |                |
| Freezing point        |              | No data available |                |
| Boiling point         |              | No data available |                |
| Flash point           |              | No data available |                |
| Evaporation rate      |              | No data available |                |
| flammability          |              | No data available |                |
| Lower explosion limit |              | No data available |                |
| Upper explosion limit |              | No data available |                |
| Vapour pressure       |              | No data available |                |
| Vapour density        |              | No data available |                |

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|                               |                   |
|-------------------------------|-------------------|
| Relative density              | No data available |
| Density                       | No data available |
| Solubility (Water)            | No data available |
| Solubility (Ethanol)          | No data available |
| Solubility (Acetone)          | No data available |
| Solubility (Organic solvents) | No data available |
| Log KOC                       | No data available |
| Auto-ignition temperature     | No data available |
| Decomposition temperature     | No data available |
| Kinematic viscosity           | No data available |
| Dynamic viscosity             | No data available |

### 9.2 - Other information

|                         |                   |
|-------------------------|-------------------|
| VOC content             | No data available |
| Minimum ignition energy | No data available |
| Conductivity            | No data available |

## SECTION 10: Stability and reactivity

### 10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

### 10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

### 10.4 - Conditions to avoid

- No information available.

### 10.5 - Incompatible materials

- No information available.

### 10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

## SECTION 11: Toxicological information

### 11.1 - Information on toxicological effects

Acute toxicity - Not classified

Toxicity : Mixture

|                                       |                   |
|---------------------------------------|-------------------|
| LD50 oral (rat)                       | No data available |
| LD50 dermal (rat)                     | No data available |
| LD50 dermal (rabbit)                  | No data available |
| LC50 inhalation (rat)                 | No data available |
| LC50 inhalation dusts and mists (rat) | No data available |

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|  |  |                   |
|--|--|-------------------|
|  | LC50 inhalation vapours (rat)  | No data available |
|  | - Based on available data, the classification criteria are not met.  |                   |
| <u>Skin corrosion/irritation</u>         | - Not classified   |                   |
| <u>Serious eye damage/eye irritation</u> | - Not classified   |                   |
| <u>Respiratory or skin sensitisation</u> | - Sensitisation — Respiratory, category 1 - May cause allergy or asthma symptoms or breathing difficulties if inhaled<br>- Skin sensitization - Category 1 - May cause an allergic skin reaction |                   |
|  | - May cause sensitization by inhalation.<br>- May cause sensitization by skin contact.<br>- May cause an allergic skin reaction.   |                   |
| <u>Germ cell mutagenicity</u>            | - Not classified   |                   |
| <u>Carcinogenicity</u>                   | - Not classified   |                   |
| <u>Reproductive toxicity</u>             | - Not classified   |                   |
| <u>STOT-single exposure</u>              | - Not classified   |                   |
| <u>STOT-repeated exposure</u>            | - Not classified   |                   |
| <u>Aspiration hazard</u>                 | - Not classified   |                   |

### SECTION 12: Ecological information

#### 12.1 - Toxicity

##### Toxicity : Mixture

|                                   |                   |
|-----------------------------------|-------------------|
| EC50 48 hr crustacea              | No data available |
| LC50 96 hr fish                   | No data available |
| ErC50 algae                       | No data available |
| ErC50 other aquatic plants        | No data available |
| NOEC chronic fish                 | No data available |
| NOEC chronic crustacea            | No data available |
| NOEC chronic algae                | No data available |
| NOEC chronic other aquatic plants | No data available |

- The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

#### 12.2 - Persistence and degradability

|                                 |                   |
|---------------------------------|-------------------|
| Biochemical oxygen demand (BOD) | No data available |
| Chemical oxygen demand (COD)    | No data available |
| % of biodegradation in 28 days  | No data available |

- No information available.

#### 12.3 - Bioaccumulative potential

|                               |                   |
|-------------------------------|-------------------|
| Bioconcentration factor (BCF) | No data available |
| Log KOC                       | No data available |

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- No indication of bioaccumulation potential.

### 12.4 - Mobility in soil

- No information available.

### 12.5 - Results of PBT and vPvB assessment

- No information available.

- No information available.

### 12.6 - Other adverse effects

- No information available.

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## SECTION 13: Disposal considerations

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### 13.1 - Waste treatment methods

#### Waste treatment methods

- Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
- Handle contaminated packages in the same way as the substance itself.

#### Sewage disposal

- No information available.

#### Special precautions for waste treatment

- Waste requires special monitoring.  
- Collect the waste separately.  
- Send to a hazardous waste incinerator facility under observation of official regulations.  
- Waste requires monitoring.  
- The waste is to be kept separate from other types of waste until its disposal.

#### Community or national or regional provisions

- Dispose according to legislation.

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## SECTION 14: Transport information

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### 14.1 - UN number

Not applicable

### 14.2 - UN proper shipping name

### 14.3 - Transport hazard class(es)

### 14.4 - Packing group

### 14.5 - Environmental hazards

#### Additional information

- No dangerous good in sense of these transport regulations.

### 14.6 - Special precautions for user

### 14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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## SECTION 15: Regulatory information

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



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Substances REACH candidates None

Substances Annex XIV None

Substances Annex XVII None

VOC content No data available

### 15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

## SECTION 16: Other information

### SDS versions

| Version | Issue date | Description of the amendments |
|---------|------------|-------------------------------|
| 1       | 12.03.2019 |                               |

Abbreviations and acronyms - See overview table at [www.euphrac.eu](http://www.euphrac.eu)

### Texts of the regulatory sentences

|                  |   |
|------------------|---|
| Eye Dam. 1       | Serious eye damage, Category 1  |
| Eye Irrit. 2     | Eye irritation - Category 2   |
| H314             | Causes severe skin burns and eye damage                                   |
| H315             | Causes skin irritation  |
| H317             | May cause an allergic skin reaction                                       |
| H319             | Causes serious eye irritation   |
| H334             | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H335             | May cause respiratory irritation  |
| Met. Corr. 1     | Corrosive to metals - Category 1  |
| Resp. Sens. 1    | Sensitisation — Respiratory, category 1                                   |
| Skin Corr. 1B    | Skin corrosion, Category 1B   |
| Skin Irrit. 2    | Irritation, Category 2  |
| Skin Sens. 1     | Skin sensitization - Category 1   |
| STOT SE 3 (H335) | STOT-single exposure - Category 3 (H335)                                  |

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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