

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 8 (replaces version 7)

Revision: 19.01.2023

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

### 1.1 Product identifier

· **Trade name:** PEP/pH· **Article number:** 109648· **Description:** Pepsin cleaning solution

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

· **Product category:** PC21 Laboratory chemicals· **Process category:** PROC15 Use as laboratory reagent· **Application of the substance / the preparation:** Cleaning of electrodes

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

· **Manufacturer/Supplier:**

Xylem Analytics Germany GmbH

WTW

Am Achalaich 11

82362 Weilheim

Germany

Tel. +49 881 183-0

· **Further information obtainable from:** E-mail: Info.WTW@xylem.com· **1.4 Emergency telephone number:** Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008:**

GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

### 2.2 Label elements:

· **Labelling according to Regulation (EC) No 1272/2008:** The product is classified and labelled according to the CLP regulation.· **Hazard pictograms:**

GHS05

· **Signal word:** Warning· **Hazard statements:**

H290 May be corrosive to metals.

· **Precautionary statements:**

P234 Keep only in original packaging.

· **Additional information:**

EUH208 Contains Pepsin A. May produce an allergic reaction.

· **Labelling of packages where the contents do not exceed 125 ml:**· **Hazard pictograms:** Void· **Signal word:** Void· **Hazard statements:** Void

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**Precautionary statements:**

P234 Keep only in original packaging.

**2.3 Other hazards** No further relevant information available.

## SECTION 3: Composition/information on ingredients



### 3.2 Mixtures

**Description:**

Mixture of substances listed below with nonhazardous additions.

Water, pepsin A, hydrochloric acid

**Dangerous components:**

CAS: 9001-75-6 EINECS: 232-629-3 Index number: 647-008-00-6	Pepsin A	 Resp. Sens. 1, H334;  Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	0.1 - < 1%
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**Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:**

Wash with plenty of water.

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

If skin irritation or rash occurs: Get medical advice/attention.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Make victim drink water immediately (2 glasses at most).

Do not induce vomiting (risk of perforation)

Call a doctor immediately.

Do not attempt to neutralize.

**4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

**Hazards** May produce an allergic reaction.

**4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing agents:** The product is not flammable. Extinguishing agent to suit environment.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

### 5.3 Advice for firefighters

**Protective equipment:** No special measures required.

## SECTION 6: Accidental release measures

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

Wear personal protective equipment (see section 8).

**6.2 Environmental precautions:** No special measures required.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Wash off residuals with water.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Wear personal protective equipment (see section 8)
  - **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** Store tightly sealed at temperatures between 15 °C and 25 °C.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

    - **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
  - **Appropriate engineering controls** No further data; see item 7.
  - **Individual protection measures, such as personal protective equipment**
    - **General protective and hygienic measures:**

Avoid contact with the eyes and skin.  
Do not inhale gases / fumes / aerosols.  
Take off contaminated clothing and wash it before reuse.  
Wash hands before breaks and at the end of work.
    - **Respiratory protection:** Use suitable respiratory protective device only when aerosol or mist is formed.
      - **Recommended filter device for short term use:** Combination filter B-P2
    - **Hand protection** Protective gloves
      - **Material of gloves** Nitrile rubber, NBR
    - **Eye/face protection** Safety glasses
  - **Environmental exposure controls** Not hazardous for water.

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**

· <b>Physical state</b>	Fluid
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Odourless
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Boiling point or initial boiling point and boiling range</b>	100 °C
· <b>Flash point:</b>	Not applicable.
· <b>pH</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Fully miscible.
· <b>Vapour pressure at 20 °C:</b>	23 hPa

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· <b>Density and/or relative density</b> · <b>Density at 20 °C:</b>		1 g/cm <sup>3</sup>
· <b>9.2 Other information</b> · <b>Important information on protection of health and environment, and on safety.</b> · <b>Explosive properties:</b>		
		Product does not present an explosion hazard.
· <b>Information with regard to physical hazard classes</b>		
· <b>Explosives</b>		Void
· <b>Flammable gases</b>		Void
· <b>Aerosols</b>		Void
· <b>Oxidising gases</b>		Void
· <b>Gases under pressure</b>		Void
· <b>Flammable liquids</b>		Void
· <b>Flammable solids</b>		Void
· <b>Self-reactive substances and mixtures</b>		Void
· <b>Pyrophoric liquids</b>		Void
· <b>Pyrophoric solids</b>		Void
· <b>Self-heating substances and mixtures</b>		Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>		Void
· <b>Oxidising liquids</b>		Void
· <b>Oxidising solids</b>		Void
· <b>Organic peroxides</b>		Void
· <b>Corrosive to metals</b>		May be corrosive to metals.
· <b>Desensitised explosives</b>		Void

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
  - **Thermal decomposition / conditions to be avoided:** Do not heat above 50 °C.
- **10.3 Possibility of hazardous reactions** Formation of hydrogen possible with metals and alloys (risk of explosion).
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
  - Chlorine
  - Hydrogen chloride (HCl)

## SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
  - **Acute toxicity**
    - No quantitative toxicity data are available for this product.
    - Based on available data, the classification criteria are not met.
  - **Skin corrosion/irritation**
    - Local irritation possible.
    - Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation**
    - Irritation possible.
    - Based on available data, the classification criteria are not met.
  - **Respiratory or skin sensitisation**
    - Contains Pepsin A. May produce allergic reaction.

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

- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** 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.
- **11.2 Information on other hazards**

· <b>Endocrine disrupting properties</b>
None of the ingredients is listed.

## SECTION 12: Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
  - **General notes:** Not hazardous for water.
  - **Additional ecological information:**
    - **General notes:** Not hazardous for water.
    - **Additional ecological information:** Not hazardous for water.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
  - **Recommendation**  
Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.
  - **Uncleaned packaging:**
    - **Recommendation:**  
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.  
Packagings that may not be cleansed are to be disposed of in the same manner as the product.
    - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN number or ID number</b> <ul style="list-style-type: none"> <li>· <b>ADR/RID, IMDG, IATA</b></li> </ul> </li> </ul>                   | UN1789                                      |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b> <ul style="list-style-type: none"> <li>· <b>ADR/RID</b></li> <li>· <b>IMDG, IATA</b></li> </ul> </li> </ul> | 1789 HYDROCHLORIC ACID<br>HYDROCHLORIC ACID |

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<b>14.3 Transport hazard class(es)</b> <b>ADR/RID, IMDG, IATA</b>	
	
Class	8 Corrosive substances.
Label	8
<b>14.4 Packing group</b> <b>ADR/RID, IMDG, IATA</b>	
	III
<b>14.5 Environmental hazards:</b> <b>Marine pollutant:</b>	
	No
<b>14.6 Special precautions for user</b>	
Warning: Corrosive substances.	
Hazard identification number (Kemler code):	80
EMS Number:	F-A,S-B
Segregation groups	(SGG1a) Strong acids
Stowage Category	E
Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
<b>14.7 Maritime transport in bulk according to IMO instruments</b>	
	Not applicable.
<b>ADR/RID</b>	
Limited quantities (LQ)	5L
Transport category	3
Tunnel restriction code	E
<b>UN "Model Regulation":</b>	
	UN 1789 HYDROCHLORIC ACID, 8, III

## SECTION 15: Regulatory information

<b>15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
<b>Directive 2012/18/EU</b> <b>Named dangerous substances - ANNEX I</b> hydrogen chloride	
<b>DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II</b> None of the ingredients is listed.	
<b>REGULATION (EU) 2019/1148</b> <b>Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))</b> None of the ingredients is listed.	
<b>Annex II - REPORTABLE EXPLOSIVES PRECURSORS</b> None of the ingredients is listed.	
<b>Regulation (EC) No 273/2004 on drug precursors</b>	
7647-01-0 hydrogen chloride	3
<b>Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors</b>	
7647-01-0 hydrogen chloride	3

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**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

**Relevant phrases**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

**Date of previous version:** 12.10.2021**Version number of previous version:** 7**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international 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 Harmonised 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 (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Resp. Sens. 1: Respiratory sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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Version number 5 (replaces version 4)

Revision: 20.01.2023

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

### 1.1 Product identifier

Trade name: **PL 4**

Article number: 109110

Description: Standard (DIN/NBS) buffer solution pH 4.006 / 4.01

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

Product category: PC21 Laboratory chemicals

Process category: PROC15 Use as laboratory reagent

Application of the substance / the preparation: Calibration solution

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

#### Manufacturer/Supplier:

Xylem Analytics Germany GmbH  
WTW  
Am Achalaich 11  
82362 Weilheim  
Germany  
Tel. +49 881 183-0

Further information obtainable from: E-mail: Info.WTW@xylem.com

1.4 Emergency telephone number: Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008: The product is not classified, according to the CLP regulation.

### 2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

2.3 Other hazards No further relevant information available.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Description:

Mixture, consisting of the following components:  
Water, potassium hydrogenphthalate

Dangerous components: Void

Additional information: For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information: Take off contaminated clothing and wash it before reuse.

After inhalation: Supply fresh air.

After skin contact: Rinse skin with water [or shower].

After eye contact: Rinse opened eye for several minutes under running water.

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- **After swallowing:** Get medical advice/attention if you feel unwell.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents:** The product is not flammable. Extinguishing agent to suit environment.
- **5.2 Special hazards arising from the substance or mixture** No hazards to be particularly mentioned.
- **5.3 Advice for firefighters**
  - **Protective equipment:** No special measures required.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  - No special measurements required when handled properly.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections** No dangerous substances are released.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
  - **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**
    - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
    - **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
  - **Appropriate engineering controls** No further data; see item 7.
  - **Individual protection measures, such as personal protective equipment**
    - **General protective and hygienic measures:**
      - Avoid contact with the eyes and skin.
      - Take off contaminated clothing and wash it before reuse.
      - Wash hands before breaks and at the end of work.
    - **Respiratory protection:** Not required.
    - **Hand protection** Protective gloves recommended for frequent or long-term skin contact.
      - **Material of gloves** Nitrile rubber, NBR
    - **Eye/face protection** Safety glasses
  - **Environmental exposure controls** Not hazardous for water.

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## SECTION 9: Physical and chemical properties

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

#### · General Information

· Physical state	Fluid
· Colour:	Colourless
· Odour:	Odourless
· Melting point/freezing point:	-1.6 °C
· Boiling point or initial boiling point and boiling range	100 °C
· Flammability	Product is not flammable.
· Flash point:	Not applicable.
· pH at 20 °C	4
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Vapour pressure at 20 °C:	23 hPa
· Density and/or relative density	
· Density at 20 °C:	1.01 g/cm³

### · 9.2 Other information

#### · Important information on protection of health and environment, and on safety.

· Explosive properties:	Product does not present an explosion hazard.
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#### · Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases	
in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

## SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

### · 10.2 Chemical stability

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

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· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11: Toxicological information

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

#### · **Acute toxicity**

No quantitative toxicity data are available for this product.

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

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

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

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

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

· **STOT-single exposure** 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.

### · 11.2 Information on other hazards

#### · **Endocrine disrupting properties**

None of the ingredients is listed.

## SECTION 12: Ecological information

### · 12.1 Toxicity

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** Easily biodegradable

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment** Not applicable.

· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

### · 12.7 Other adverse effects

· **General notes:** Not hazardous for water.

· **Remark:** No environmental hazards are to be expected when the product is handled properly.

· **Additional ecological information:**

· **General notes:** Not hazardous for water.

· **Additional ecological information:** Not hazardous for water.

## SECTION 13: Disposal considerations

### · 13.1 Waste treatment methods

#### · **Recommendation**

Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

#### · **Uncleaned packaging:**

##### · **Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

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## SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR/RID, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	
· ADR/RID	Void
	Void
· ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR/RID, ADN, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR/RID, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· UN "Model Regulation":	Void

## SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
· Directive 2012/18/EU
· Named dangerous substances - ANNEX I None of the ingredients is listed.
· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.
· REGULATION (EU) 2019/1148
· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.
· Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.
· Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.
· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.
· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

- Date of previous version: 12.10.2021
- Version number of previous version: 4
- Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
 ICAO: International Civil Aviation Organisation  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)  
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

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**Trade name: PL 4**

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IATA: International Air Transport Association  
GHS: Globally Harmonised 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 (division of the American Chemical Society)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

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EU

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# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 5 (replaces version 4)

Revision: 19.01.2023

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

### 1.1 Product identifier

· **Trade name:** PL 7

· **Article number:** 109120

· **Description:** Standard (DIN/NBS) buffer solution pH 6.865 / 6.87

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

· **Product category:** PC21 Laboratory chemicals

· **Process category:** PROC15 Use as laboratory reagent

· **Application of the substance / the preparation:** Calibration solution

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

· **Manufacturer/Supplier:**

Xylem Analytics Germany GmbH  
WTW  
Am Achalaich 11  
82362 Weilheim  
Germany  
Tel. +49 881 183-0

· **Further information obtainable from:** E-mail: Info.WTW@xylem.com

### 1.4 Emergency telephone number:

Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008:** The product is not classified, according to the CLP regulation.

### 2.2 Label elements:

· **Labelling according to Regulation (EC) No 1272/2008:** Void

· **Hazard pictograms:** Void

· **Signal word:** Void

· **Hazard statements:** Void

### 2.3 Other hazards

No further relevant information available.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

· **Description:**

Mixture, consisting of the following components:

Water, disodium hydrogen phosphate, potassium dihydrogen phosphate

· **Dangerous components:** Void

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

· **General information:** Take off contaminated clothing and wash it before reuse.

· **After inhalation:** Supply fresh air.

· **After skin contact:** Rinse skin with water [or shower].

· **After eye contact:** Rinse opened eye for several minutes under running water.

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Trade name: PL 7

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- **After swallowing:** Get medical advice/attention if you feel unwell.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents:** The product is not flammable. Extinguishing agent to suit environment.
- **5.2 Special hazards arising from the substance or mixture** No hazards to be particularly mentioned.
- **5.3 Advice for firefighters**
  - **Protective equipment:** No special measures required.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:** Wash off with water.
- **6.4 Reference to other sections** No dangerous substances are released.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
  - **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

    - **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
  - **Appropriate engineering controls** No further data; see item 7.
  - **Individual protection measures, such as personal protective equipment**
    - **General protective and hygienic measures:**

Avoid contact with the eyes and skin.

Take off contaminated clothing and wash it before reuse.

Wash hands before breaks and at the end of work.
    - **Respiratory protection:** Not required.
    - **Hand protection** Not required.
    - **Eye/face protection** Safety glasses
  - **Environmental exposure controls** Not hazardous for water.

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# Safety data sheet

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Revision: 19.01.2023

Trade name: PL 7

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## SECTION 9: Physical and chemical properties

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

#### · General Information

· Physical state	Fluid
· Colour:	Colourless
· Odour:	Odourless
· Melting point/freezing point:	-0.3 °C
· Boiling point or initial boiling point and boiling range	100 °C
· Flammability	Product is not flammable.
· Flash point:	Not applicable.
· pH at 20 °C	6.87
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Vapour pressure at 20 °C:	23 hPa
· Density and/or relative density	
· Density at 20 °C:	1.01 g/cm³

### · 9.2 Other information

#### · Important information on protection of health and environment, and on safety.

· Explosive properties:	Product does not present an explosion hazard.
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#### · Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases	
in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

## SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

#### · 10.2 Chemical stability

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** No dangerous reactions known.

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

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Trade name: PL 7

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· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

## SECTION 11: Toxicological information

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

#### · **Acute toxicity**

No quantitative toxicity data are available for this product.

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

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

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

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

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

· **STOT-single exposure** 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.

### · 11.2 Information on other hazards

#### · **Endocrine disrupting properties**

None of the ingredients is listed.

## SECTION 12: Ecological information

### · 12.1 Toxicity

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment** Not applicable.

· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

### · 12.7 Other adverse effects

· **General notes:** Not hazardous for water.

· **Additional ecological information:**

· **General notes:** Not hazardous for water.

· **Additional ecological information:** Not hazardous for water.

## SECTION 13: Disposal considerations

### · 13.1 Waste treatment methods

#### · **Recommendation**

Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

#### · **Uncleaned packaging:**

##### · **Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

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# Safety data sheet

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Trade name: PL 7

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## SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR/RID, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	
· ADR/RID	Void
	Void
· ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR/RID, ADN, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR/RID, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· UN "Model Regulation":	Void

## SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
· Directive 2012/18/EU
· Named dangerous substances - ANNEX I None of the ingredients is listed.
· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.
· REGULATION (EU) 2019/1148
· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.
· Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.
· Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.
· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.
· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

· Date of previous version: 19.01.2023

· Version number of previous version: 4

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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**Trade name: PL 7**

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IATA: International Air Transport Association  
GHS: Globally Harmonised 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 (division of the American Chemical Society)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

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EU

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# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 19.01.2023

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

### 1.1 Product identifier

Trade name: **PL 9**

Article number: 109130

Description: Standard (DIN/NBS) buffer solution pH 9,180 / 9.18

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

Product category: PC21 Laboratory chemicals

Process category: PROC15 Use as laboratory reagent

Application of the substance / the preparation: Calibration solution

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

#### Manufacturer/Supplier:

Xylem Analytics Germany GmbH  
WTW  
Am Achalaich 11  
82362 Weilheim  
Germany  
Tel. +49 881 183-0

Further information obtainable from: E-mail: Info.WTW@xylem.com

### 1.4 Emergency telephone number: Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008:



GHS08 health hazard

Repr. 1B H360FD May damage fertility. May damage the unborn child.

### 2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.

#### Hazard pictograms:



GHS08

Signal word: Danger

#### Hazard-determining components of labelling:

Disodium tetraborate, decahydrate

#### Hazard statements:

H360FD May damage fertility. May damage the unborn child.

#### Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

#### Additional information:

Restricted to professional users.

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Trade name: PL 9

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· **2.3 Other hazards** No further relevant information available.


## SECTION 3: Composition/information on ingredients

### · 3.2 Mixtures

#### · Description:

Mixture, consisting of the following components:  
Water, disodium tetraborate decahydrate

#### · Dangerous components:

CAS: 1303-96-4 EINECS: 215-540-4 Index number: 005-011-00-4	Disodium tetraborate, decahydrate	 Repr. 1B, H360FD	0.1-≤1%
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#### · SVHC

1303-96-4 Disodium tetraborate, decahydrate

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### · 4.1 Description of first aid measures

· **After inhalation:** Supply fresh air.

#### · After skin contact:

Wash with plenty of water.  
Take off immediately all contaminated clothing and wash it before reuse.  
If skin irritation or rash occurs: Get medical advice/attention.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

#### · After swallowing:

Rinse out mouth and then drink plenty of water.  
Seek immediate medical advice.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## SECTION 5: Firefighting measures

### · 5.1 Extinguishing media

· **Suitable extinguishing agents:** The product is not flammable. Extinguishing agent to suit environment.

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

In case of fire, the following can be released:  
Boron oxide

### · 5.3 Advice for firefighters

· **Protective equipment:** Wear self-contained respiratory protective device.

## SECTION 6: Accidental release measures

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

Wear personal protective equipment (see section 8).

· **6.2 Environmental precautions:** No special measures required.

### · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
  - **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** Store tightly sealed at temperatures between 15 °C and 25 °C.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

    - **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
  - **Appropriate engineering controls** No further data; see item 7.
  - **Individual protection measures, such as personal protective equipment**
    - **General protective and hygienic measures:**

Avoid contact with the eyes and skin.  
Do not inhale gases / fumes / aerosols.  
Take off contaminated clothing and wash it before reuse.  
Wash hands before breaks and at the end of work.
    - **Respiratory protection:** Use suitable respiratory protective device only when aerosol or mist is formed.
      - **Recommended filter device for short term use:** Combination filter B-P2
    - **Hand protection** Protective gloves
      - **Material of gloves** Nitrile rubber, NBR
    - **Eye/face protection** Safety glasses
  - **Environmental exposure controls** Not hazardous for water.

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
  - **General Information**

· <b>Physical state</b>	Fluid
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Odourless
· <b>Melting point/freezing point:</b>	-0.3 °C
· <b>Boiling point or initial boiling point and boiling range</b>	100 °C
· <b>Flammability</b>	Product is not flammable.
· <b>Flash point:</b>	Not applicable.
· <b>pH at 20 °C</b>	9.18
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Fully miscible.
· <b>Vapour pressure at 20 °C:</b>	23 hPa

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· <b>Density and/or relative density</b> · <b>Density at 20 °C:</b>		1 g/cm <sup>3</sup>
· <b>9.2 Other information</b> · <b>Important information on protection of health and environment, and on safety.</b> · <b>Explosive properties:</b>		
		Product does not present an explosion hazard.
· <b>Information with regard to physical hazard classes</b>		
· <b>Explosives</b>		Void
· <b>Flammable gases</b>		Void
· <b>Aerosols</b>		Void
· <b>Oxidising gases</b>		Void
· <b>Gases under pressure</b>		Void
· <b>Flammable liquids</b>		Void
· <b>Flammable solids</b>		Void
· <b>Self-reactive substances and mixtures</b>		Void
· <b>Pyrophoric liquids</b>		Void
· <b>Pyrophoric solids</b>		Void
· <b>Self-heating substances and mixtures</b>		Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>		Void
· <b>Oxidising liquids</b>		Void
· <b>Oxidising solids</b>		Void
· <b>Organic peroxides</b>		Void
· <b>Corrosive to metals</b>		Void
· <b>Desensitised explosives</b>		Void

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
  - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** In case of fire, see section 5.

## SECTION 11: Toxicological information

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

### · **Acute toxicity**

No quantitative toxicity data are available for this product.  
Based on available data, the classification criteria are not met.

### · **LD/LC50 values relevant for classification:**

#### **1303-96-4 Disodium tetraborate, decahydrate**

Oral	LD50	2660 mg/kg (Rat) (RTECS)
Dermal	LD50	> 2000 mg/kg (Rat) (IUCLID)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** May damage fertility. May damage the unborn child.

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- **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.

## · 11.2 Information on other hazards

### · Endocrine disrupting properties

None of the ingredients is listed.

## SECTION 12: Ecological information

### · 12.1 Toxicity

#### · Aquatic toxicity:

##### 1303-96-4 Disodium tetraborate, decahydrate

EC50 1085 – 1402 mg/l, 48 h (Daphnia magna) (IUCLID)

LC50 630 mg/l, 72 h (Carassius auratus) (IUCLID)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
  - **General notes:** Not hazardous for water.
  - **Additional ecological information:**
    - **General notes:** Not hazardous for water.
    - **Additional ecological information:** Not hazardous for water.

## SECTION 13: Disposal considerations

### · 13.1 Waste treatment methods

#### · Recommendation

Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

#### · Uncleaned packaging:

##### · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

### · 14.1 UN number or ID number

- **ADR/RID, ADN, IMDG, IATA** Void

### · 14.2 UN proper shipping name

- **ADR/RID** Void
- **ADN, IMDG, IATA** Void

### · 14.3 Transport hazard class(es)

- **ADR/RID, ADN, IMDG, IATA**
- **Class** Void

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· <b>14.4 Packing group</b>	
· <b>ADR/RID, IMDG, IATA</b>	Void
· <b>14.5 Environmental hazards:</b>	Not applicable.
· <b>14.6 Special precautions for user</b>	Not applicable.
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>UN "Model Regulation":</b>	Void

## SECTION 15: Regulatory information

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

#### · Directive 2012/18/EU

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 30

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

#### · REGULATION (EU) 2019/1148

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

#### · Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

#### · Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

#### · Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

#### · National regulations:

#### · Other regulations, limitations and prohibitive regulations

#### · Substances of very high concern (SVHC) according to REACH, Article 57

1303-96-4 Disodium tetraborate, decahydrate

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

#### · Relevant phrases

H360FD May damage fertility. May damage the unborn child.

· **Date of previous version:** 17.11.2022

· **Version number of previous version:** 6

#### · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 19.01.2023

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**Trade name: PL 9**

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Repr. 1B: Reproductive toxicity – Category 1B

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EU

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# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 3 (replaces version 2)

Revision: 23.01.2023

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

### 1.1 Product identifier

· **Trade name:** KCI-250· **Article number:** 109705· **Description:** Potassium chloride solution 3 mol/l (AgCl-free)

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

· **Product category:** PC21 Laboratory chemicals· **Process category:** PROC15 Use as laboratory reagent· **Application of the substance / the preparation:** Electrolyte solution

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

· **Manufacturer/Supplier:**

Xylem Analytics Germany GmbH

WTW

Am Achalaich 11

82362 Weilheim

Germany

Tel. +49 881 183-0

· **Further information obtainable from:** E-mail: Info.WTW@xylem.com· **1.4 Emergency telephone number:** Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008:** The product is not classified, according to the CLP regulation.

### 2.2 Label elements:

· **Labelling according to Regulation (EC) No 1272/2008:** Void· **Hazard pictograms:** Void· **Signal word:** Void· **Hazard statements:** Void· **2.3 Other hazards** No further relevant information available.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

· **Description:**

Mixture, consisting of the following components:

Water, potassium chloride

· **Dangerous components:** Void· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

· **After inhalation:** Supply fresh air.· **After skin contact:** Rinse skin with water [or shower].· **After eye contact:** Rinse opened eye for several minutes under running water.

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- **After swallowing:**
  - Rinse out mouth and then drink plenty of water.
  - Get medical advice/attention if you feel unwell.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
  - **Suitable extinguishing agents:** The product is not flammable. Extinguishing agent to suit environment.
- **5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:  
Hydrogen chloride (HCl)
- **5.3 Advice for firefighters**
  - **Protective equipment:** Wear self-contained respiratory protective device.
  - **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** No special measures required.
- **6.2 Environmental precautions:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Wash off residuals with water.
- **6.4 Reference to other sections** No dangerous substances are released.

## SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
  - **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Requirements to be met by storerooms and receptacles:** No special requirements.
  - **Information about storage in one common storage facility:** Not required.
  - **Further information about storage conditions:** Store tightly sealed at temperatures between 15 °C and 25 °C.
- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
  - **Appropriate engineering controls** No further data; see item 7.
  - **Individual protection measures, such as personal protective equipment**
    - **General protective and hygienic measures:**

Avoid contact with the eyes and skin.  
Do not inhale gases / fumes / aerosols.  
Take off contaminated clothing and wash it before reuse.  
Wash hands before breaks and at the end of work.
    - **Respiratory protection:** Not required.

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· **Hand protection** Protective gloves recommended for frequent or long-term skin contact.

· **Material of gloves** Nitrile rubber, NBR

· **Eye/face protection** Safety glasses

· **Environmental exposure controls**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

## SECTION 9: Physical and chemical properties

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

#### · General Information

· <b>Physical state</b>	Fluid
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Odourless
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Boiling point or initial boiling point and boiling range</b>	100 °C
· <b>Flammability</b>	Product is not flammable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	Not applicable.
· <b>pH at 20 °C</b>	6.2
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Fully miscible.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	1.13 g/cm <sup>3</sup>

### · 9.2 Other information

#### · Important information on protection of health and environment, and on safety.

· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.

#### · Information with regard to physical hazard classes

· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Void
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases</b>	
· <b>in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void

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Desensitised explosives

Void

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
  - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** In case of fire, see section 5.

## SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
  - **Acute toxicity**  
No quantitative toxicity data are available for this product.  
Based on available data, the classification criteria are not met.
  - **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
  - **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
  - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
  - **STOT-single exposure** 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.
  - **Additional toxicological information:**
    - **Acute effects (acute toxicity, irritation and corrosivity):**  
After swallowing a large amount of potassium chloride, cardiac/circulatory disorder, agitation and spasms may occur.
- **11.2 Information on other hazards**

Endocrine disrupting properties

None of the ingredients is listed.

## SECTION 12: Ecological information

- **12.1 Toxicity**
  - **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
  - **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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Trade name: KCI-250

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Recommendation

Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

#### European waste catalogue

06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 03 00	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

#### Uncleaned packaging:

##### Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

##### Recommended cleansing agents:

Water, if necessary together with cleansing agents.

## SECTION 14: Transport information

### 14.1 UN number or ID number

#### ADR/RID, ADN, IMDG, IATA

Void

### 14.2 UN proper shipping name

#### ADR/RID

Void

Void

#### ADN, IMDG, IATA

Void

### 14.3 Transport hazard class(es)

#### ADR/RID, ADN, IMDG, IATA

##### Class

Void

### 14.4 Packing group

#### ADR/RID, IMDG, IATA

Void

### 14.5 Environmental hazards:

Not applicable.

### 14.6 Special precautions for user

Not applicable.

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

Not applicable.

#### UN "Model Regulation":

Void

## SECTION 15: Regulatory information

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

#### Directive 2012/18/EU

##### Named dangerous substances - ANNEX I

None of the ingredients is listed.

#### DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

#### REGULATION (EU) 2019/1148

##### Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

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### · Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

### · Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

### · Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

· **Date of previous version:** 12.10.2021

· **Version number of previous version:** 2

### · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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