

This safety data sheet complies with the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008, (EU) No. 453/2010  
Version 1.1 Revision date 26-01-2016  
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## 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

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### 1.1 Product Identifier

Product name : pH 4.01 Buffer  
Product number(s) : pH4,01/100ml, pH4,01/500mlS, pH4,01/5ltr, pH4,01/20ltr  
Supplier: Hydrocal  
REACH Number : A registration number is not available for this substance as the substance or use, except for registration for the annual volume does not require a registration or the registration is equipped with a later registration deadline.

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

Recommended Use : Use as laboratory reagent, Calibration solution

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

Manufacturer/Supplier: Hydrocal B.V.  
Wallerstraat 125k  
3862 CN NIJKERK  
The Netherlands  
Telephone : +31 (0)88-8760101  
E-mail address : [info@hydrocal.nl](mailto:info@hydrocal.nl)

### 1.4 Emergency telephone number

Emergency telephone number: +31 (0)88-8760101 Solely intended to inform professional caregivers in acute poisoning

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## 2: HAZARDS IDENTIFICATION

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### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) Nr 1272/2008

This mixture is classified as not hazardous.

#### Classification according to EU Directives 67/548/EEG or 1999/45/EG

This preparation is not classified as hazardous.

### 2.2 Label elements according to Directive (EC) Nr 1272/2008

Hazard statements: No information available  
Safety Precautions: No information available

#### Labelling (67/548 / EEG of 1999/45 / EG)

R- phrases: No information available  
S- phrases: No information available

### 2.3 Other hazards

No information available

### 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

No information available

#### 3.2 Mixtures

Component	EC-No.	CAS-No.	Weight %	DSD Classification – 67/548/EEC	CLP Classification – Regulation (EC No. 1272/2008)
Water	23-791-2	7732-18-5	90 – 100%	-	-
Potassium Hydrogen Phthalate	212-889-4	877-24-7	0 – 10%	-	-
Potassium Hydroxide	215-181-3	1310-58-3	0 – 10%	XN; R22 C; R35	Acute Tox. 4 (H302) Skin Corr. 1A (H314)
Amarant	213-022-2	915-67-3	0 – 10%	-	-

### 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

<b>General Advice:</b>	Use first aid treatment according to the nature of the injury. For further assistance, contact your local Poison Control Center. Show this safety data sheet to the doctor in attendance.
<b>Inhalation:</b>	Move to fresh air. If symptoms persist, obtain medical attention.
<b>Skin Contact:</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
<b>Eye Contact:</b>	In case of eye contact, rinse immediately with plenty of water for at least 15 minutes. If symptoms persist, obtain medical attention.
<b>Ingestion:</b>	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting. If symptoms persist, call a physician or Poison Control Center immediately.

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

No information available.

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

No information available.

### 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Thermal decomposition can lead to release of irritating gases and vapors.

### 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

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## 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Evacuate personnel to safe areas.

### 6.2 Environmental precautions

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

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

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Prevent further leakage or spillage if safe to do so.

### 6.4 Reference to Other Sections

For additional waste treatment information, see section 13.

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## 7: HANDLING AND STORAGE

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### 7.1 Precautions for safe handling

To avoid risks to human health and the environment, comply with the instructions for use. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray. Ensure adequate ventilation, especially in confined areas.

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

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from direct sunlight.

### 7.3 Specific end use(s)

Some of the applications mentioned in section 1.2  
No other applications have been agreed

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## 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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### 8.1 Control parameters

#### Components with workplace control parameters

The product contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering Measures

Use in accordance with current rules and practices with regard to industrial hygiene and safety.  
Wash hands before breaks and at the end of the working day.

**Personal protective equipment****Eye/face Protection**

Face protection and safety glasses. Use facial and / or eye protection tested and approved by official institutions such as NIOSH (US) or EN 166 (EU).

**Skin and body protection**

Handle with gloves. Inspect gloves prior to use. Pull gloves neatly out without touching the outside with bare hands. Dispose gloves immediately according to the applicable laboratory regulations. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686 / EEC and the standard EN 374 derived from it. Full contact material: Nitrile rubber  
Minimum layer thickness: 0.11 mm Breakthrough time: 480 min.

**Respiratory Protection**

Provide adequate ventilation.

**Environmental exposure controls**

Prevent product from entering drains.

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**9 PHYSICAL AND CHEMICAL PROPERTIES**

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

- |  |                          |
|--|--------------------------|
| a) Appearance:                                 | Red liquid               |
| b) Odor:                                       | None                     |
| c) Odor Threshold:                             | No information available |
| d) pH:   | at 20°C pH 4.0           |
| e) Melting point/freezing point:               | No information available |
| f) Boiling Point/Range:                        | at approx. 100°C         |
| g) Flash Point:                                | No information available |
| h) Evaporation Rate:                           | No information available |
| i) Flammability (solid, gas)                   | No information available |
| j) Flammability Limit in Air:                  | No information available |
| k) Vapor pressure:                             | No information available |
| l) Vapor Density:                              | No information available |
| m) Specific Gravity:                           | at 20°C approx. 1.0 g/ml |
| n) Water Solubility:                           | Soluble                  |
| o) Partition coefficient<br>n-octanol / water: | No information available |
| p) Autoignition Temperature:                   | No information available |
| q) Decomposition Temperature:                  | No information available |
| r) Viscosity                                   | No information available |

s) Explosive Properties: No information available

t) Oxidizing Properties: No information available

## 9.2 Other safety information

No information available

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## 10: STABILITY AND REACTIVITY

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### 10.1 Reactivity

No information available

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

None under normal processing

### 10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Strong acids and bases

### 10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors.

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## 11: TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

**Acute Toxicity:** No information available

**Skin Corrosion/Irritation:** No information available

**Serious eye damage/eye irritation:** No information available

**Sensitization:** No information available

**Carcinogenic effects:** No information available

**Mutagenic Effects:** No information available

**STOT - single exposure** No information available

**STOT - repeated exposure** No information available

**Aspiration hazard** No information available

**Additional Information:** No information available

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## 12: ECOLOGICAL INFORMATION

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### 12.1 Toxicity

No information available

### 12.2 Persistence and degradability

No information available

### 12.3 Bioaccumulative potential

No information available

### 12.4 Mobility in soil

No information available

### 12.5 Results of PBT and vPvB assessment

No information available

### 12.6 Other adverse effects

No information available

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## 13: DISPOSAL CONSIDERATIONS

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### 13.1 Waste treatment methods

#### Product

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated Packaging

Dispose of as unused product.

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## 14: TRANSPORT INFORMATION

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### 14.1 UN-number

ADR/RID: -                      IMDG: -                      IATA: -

### 14.2 Proper Shipping Name

ADR/RID:                      Not dangerous goods  
IMDG:                         Not dangerous goods  
IATA:                         Not dangerous goods

### 14.3 Hazard Class

ADR/RID: -                      IMDG: -                      IATA: -

### 14.4 Packing Group

ADR/RID: -                      IMDG: -                      IATA: -

### 14.5 Environmental hazard

ADR/RID: no                      IMDG Marine pollutant: no                      IATA: no

**14.6 Special Provisions**

No information available

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

No information available

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**15: REGULATORY INFORMATION**

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This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No information available

**15.2 Chemical safety assessment**

For this product no chemical safety assessment has been carried out.

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**16: OTHER INFORMATION**

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**Full text of H-phrases referred to under sections 2 and 3.**

H302 = Harmful if swallowed

H314 = Causes severe skin burns and eye damage

R 22 = Harmful if swallowed

R 35 = Causes severe burns

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