

## Material Safety Data Sheet

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### 1. Product & Company Identification

<b>Product:</b>	pH 4.01 Standard Buffer Solution
<b>Manufacturer:</b>	Conrad Electronic SE
<b>Address:</b>	Klaus-Conrad-Str. 1, D-92240 Hirschau
<b>Telephone:</b>	+49 (0) 9604 / 40 - 8988
<b>Date of issue:</b>	16.07.2018

### 2. Hazard Identification

**Recommended use and restrictions on the use:** pH meter calibration using only.

**Object hazard classification:** Not classified.

**Hazard Symbols:** -

**Signal word:** -

**Hazard:**

- Skin contact: Gently wash with plenty of soap and water.
- Eye contact: Rinse cautiously with water for more than 15 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion: When a large number of eating, large amounts of lukewarm water or milk to induce vomiting, medical treatment and then rapidly.
- Precautionary: Wear protective gloves, eye protection, protective clothing. Store in corrosive resistant polypropylene container with a resistant inner.

**Other hazards:**

### 3. Component identification information

**Pure substances:**

English name: Phthalate pH Standard Buffer Solution

Synonyms: -

CAS registry number (CAS No.): 877-24-7

Composition of hazardous substances (The percentage composition): 1%

**Mixture:**

Chemical properties:

Composition of hazardous substances: Potassium Hydrogen Phthalate

Concentration or concentration range (The percentage composition): 1 %

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### 4. First aid measures

**Different routes of exposure of the first aid:**

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

**Skin contact:** Gently wash with plenty of soap and water.

**Eye contact:** Rinse cautiously with water for more than 15 minutes. If eye irritation persists: Get medical advice/attention.

**Ingestion:** When a large number of eating, large amounts of lukewarm water or milk to induce vomiting, medical treatment and then rapidly.

**The most important symptoms and hazardous effects:** -

**Protection of emergency personnel:** Wear protective gloves to avoid contacting, eating.

**Prompted by the doctor:** To give proper treatment to the injured symptoms.

### 5. Fire-fighting measures

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

**Hazardous combustion products:** Ambient fire may liberate hazardous vapours.

**Special fire fighting procedures:** -

**Special protective equipment for fire fighting:** Do not enter fire area without proper protective equipment, including respiratory protection. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 6. Accidental release measures

**Personal precautions:** Wear suitable protective clothing. Avoid breathing vapours, mist or gas. Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Wear gloves and goggles processing.

**Environmental Considerations:** -

**Methods for cleaning up:** Cover and collect leak or spill. Transfer to suitable, labeled containers for disposal. Store away from other materials.

### 7. Handling and Storage

**Disposal:** General location. Wash hands and other exposed areas with mild soap and water.

**Store:** Avoid exposure. Keep container tightly closed. Store in a cool, dry area.

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### 8. Exposure prevention measures

Engineering controls:	Install safety shower and eye bath.
Biological indicators:	-
Personal protective equipment:	-
Respiratory Protection:	None.
Hand Protection:	Protective gloves.
Eye Protection:	Safety glasses.
Skin and body protection:	Protective clothing.
Health measures:	Wash hands.

### 9. Physical and chemical properties

Appearance (physical state, color, etc.):	Aqueous solution, colorless.
Odor threshold:	None.
pH value:	pH 4.01 (25 °C)
Flammability (solid, gas):	None.
Decomposition temperature:	The liquid does not break down.
Ignition temperature:	Solution is not spontaneous combustion.
Vapor pressure:	-
Density:	1 g/cm <sup>3</sup> (25 °C)
Octanol / water partition coefficient(log Kow):	-
Odor:	Odorless.
Melting point:	-
Boiling point / range:	Approx 100 °C.
Flash Point:	-
Test methods:	-
Explosion:	Solution is not explosible.
Vapor density:	-
Solubility:	-
Evaporation rate:	-

### 10. Stability and reactivity

Stability:	Stable under proper conditions.
Special Conditions of Hazardous Reaction:	-
Conditions to avoid:	-
Materials to avoid:	-
Hazardous Decomposition Products:	-

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### 11. Toxicity Data

Route of exposure:	Mouth, eyes.
Symptoms:	Slight eye irritation if exposed.
Acute Toxicity:	-
Chronic or long-term toxicity:	-

### 12. Ecological information

Ecotoxicity:	Weak acid.
Persistence and degradability:	-
Bioaccumulation:	-
Mobility in soil:	-
Other adverse effects:	Stable under appropriate use.

### 13. Waste disposal methods

Waste disposal methods:	Disposal according to the relevant regulations.
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### 14. Transport information

UN:	Non-management products.
UN shipping name:	Non-management products without shipping name.
Hazard Classification:	Not apply to non-hazardous materials.
Packing Type:	Drum, bottle.
Marine pollutant (yes / no):	No
Special delivery methods and precautions:	Avoid leakage.

### 15. Regulatory information

Applicable Regulations: Occupational Safety and Health regulations, industrial waste treatment and storage facilities, standard clearance.

### 16. Other information

#### References

Japan Chemical Industry Co., Ltd. pharmacological material safety data sheets

## Material Safety Data Sheet

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### 1. Product & Company Identification

<b>Product:</b>	pH 7.00 Standard Buffer Solution
<b>Manufacturer:</b>	Conrad Electronic SE
<b>Address:</b>	Klaus-Conrad-Str. 1, D-92240 Hirschau
<b>Telephone:</b>	+49 (0) 9604 / 40 - 8988
<b>Date of issue:</b>	16.07.2018

### 2. Hazard Identification

**Recommended use and restrictions on the use:** pH meter calibration using only.

**Object hazard classification:** Not classified.

**Hazard Symbols:** -

**Signal word:** -

**Hazard:**

- Skin contact: Gently wash with plenty of soap and water.
- Eye contact: Rinse cautiously with water for more than 15 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion: When a large number of eating, large amounts of lukewarm water or milk to induce vomiting, medical treatment and then rapidly.
- Precautionary: Wear protective gloves, eye protection, protective clothing. Store in corrosive resistant polypropylene container with a resistant inner.

**Other hazards:** -

### 3. Component identification information

**Pure substances:**

English name: pH7.00 Phosphate pH Standard Buffer Solution

Synonyms: -

CAS registry number (CAS No.) : KH<sub>2</sub>PO<sub>4</sub> (7778-77-0), Na<sub>2</sub>HPO<sub>4</sub> (7558-79-4).

Composition of hazardous substances (The percentage composition):  
0.3 % Potassium dihydrogen phosphate,  
0.4 % Disodium hydrogen phosphate.

**Mixture:**

Chemical properties:

- Composition of hazardous substances: Potassium Dihydrogen Phosphate  
Concentration or concentration range (The percentage composition): 0.3 %
- Composition of hazardous substances: Disodium Hydrogen Phosphate  
Concentration or concentration range (The percentage composition): 0.4 %

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### 4. First aid measures

**Different routes of exposure of the first aid:**

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

**Skin contact:** Gently wash with plenty of soap and water.

**Eye contact:** Rinse cautiously with water for more than 15 minutes. If eye irritation persists: Get medical advice/attention.

**Ingestion:** When a large number of eating, large amounts of lukewarm water or milk to induce vomiting, medical treatment and then rapidly.

**The most important symptoms and hazardous effects:** -

**Protection of emergency personnel:** Wear protective gloves to avoid contacting, eating.

**Prompted by the doctor:** To give proper treatment to the injured symptoms.

### 5. Fire-fighting measures

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

**Hazardous combustion products:** Ambient fire may liberate hazardous vapours.

**Special fire fighting procedures:** -

**Special protective equipment for fire fighting:** Do not enter fire area without proper protective equipment, including respiratory protection. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 6. Accidental release measures

**Personal precautions:** Wear suitable protective clothing. Avoid breathing vapours, mist or gas. Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Wear gloves and goggles processing.

**Environmental Considerations:** -

**Methods for cleaning up:** Cover and collect leak or spill. Transfer to suitable, labeled containers for disposal. Store away from other materials.

### 7. Handling and Storage

**Disposal:** General location. Wash hands and other exposed areas with mild soap and water.

**Store:** Avoid exposure. Keep container tightly closed. Store in a cool, dry area.

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### 8. Exposure prevention measures

Engineering controls:	Install safety shower and eye bath.
Biological indicators:	-
Personal protective equipment:	-
Respiratory Protection:	None.
Hand Protection:	Protective gloves.
Eye Protection:	Safety glasses.
Skin and body protection:	Protective clothing.
Health measures:	Wash hands.

### 9. Physical and chemical properties

Appearance (physical state, color, etc.):	Aqueous solution, colorless.
Odor threshold:	None.
pH value:	pH 7.00 (25 °C)
Flammability (solid, gas):	None.
Decomposition temperature:	The liquid does not break down.
Ignition temperature:	Solution is not spontaneous combustion.
Vapor pressure:	-
Density:	1 g/cm <sup>3</sup> (25 °C)
Octanol / water partition coefficient(log Kow):	-
Odor:	Odorless.
Melting point:	-
Boiling point / range:	Approx 100 °C.
Flash Point:	-
Test methods:	-
Explosion:	Solution is not explosible.
Vapor density:	-
Solubility:	-
Evaporation rate:	-

### 10. Stability and reactivity

Stability:	Stable under proper conditions.
Special Conditions of Hazardous Reaction:	-
Conditions to avoid:	-
Materials to avoid:	-
Hazardous Decomposition Products:	-

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### 11. Toxicity Data

Route of exposure:	Mouth, eyes.
Symptoms:	Slight eye irritation if exposed.
Acute Toxicity:	-
Chronic or long-term toxicity:	-

### 12. Ecological information

Ecotoxicity:	Neutral
Persistence and degradability:	-
Bioaccumulation:	-
Mobility in soil:	-
Other adverse effects:	Stable under appropriate use.

### 13. Waste disposal methods

Waste disposal methods:	Disposal according to the relevant regulations.
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### 14. Transport information

UN:	Non-management products.
UN shipping name:	Non-management products without shipping name.
Hazard Classification:	Not apply to non-hazardous materials.
Packing Type:	Drum, bottle.
Marine pollutant (yes / no):	No
Special delivery methods and precautions:	Avoid leakage.

### 15. Regulatory information

Applicable Regulations: Occupational Safety and Health regulations, industrial waste treatment and storage facilities, standard clearance.

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