according to Regulation (EC) No 1907/2006

# 2283449.99 Buffer Solution pH 4.01

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

#### 1.1. Product identifier

2283449.99 Buffer Solution pH 4.01

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

#### Use of the substance/mixture

Water analysis

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

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

# Regulation (EC) No. 1272/2008

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

# 2.2. Label elements

## Additional advice on labelling

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

## 2.3. Other hazards

None known.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

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#### **Hazardous components**

CAS No	Chemical name					
	EC No	Index No	REACH No			
	GHS Classification					
7732-18-5	Water					
	231-791-2					
877-24-7	Potassium hydrogen phthalate			< 2 %		
	212-889-4					
	Acute Tox. 4, Eye Irrit. 2; H312 H319					
23647-14-5	SPADNS					
	245-803-9					

Full text of H and EUH statements: see section 16.

### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### **General information**

Take off all contaminated clothing immediately.

### After inhalation

Move to fresh air.

## After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

## After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

#### After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.

Consult a physician. Show this safety data sheet to the doctor in attendance.

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

No known effect.

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

Treat symptomatically.

# **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

# Suitable extinguishing media

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

## Unsuitable extinguishing media

No Limit

# 5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

## 5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

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#### **Additional information**

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### **SECTION 6: Accidental release measures**

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

Use personal protective equipment.

#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

### 6.4. Reference to other sections

13. Disposal considerations

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Use only in well-ventilated areas.

Avoid contact with skin and eyes.

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

# Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place. Protect against light.

# 7.3. Specific end use(s)

Reagent for analysis

### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### Additional advice on limit values

None known.

## 8.2. Exposure controls

# Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

### Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

## Eye/face protection

Safety glasses with side-shields

### Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

#### Skin protection

Avoid contact with skin, eyes and clothing.

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### Respiratory protection

Provide adequate ventilation.

## **Environmental exposure controls**

Sweep up or vacuum up spillage and collect in suitable container for disposal.

### **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: red
Odour: none

pH-Value (at 20 °C): 4,01

## Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Flash point:

Sustaining combustion:

Inot applicable

not applicable

not applicable

No data available

#### **Flammability**

Solid: not applicable
Gas: not applicable

### **Explosive properties**

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

## **Auto-ignition temperature**

Solid: not applicable
Gas: not applicable
Decomposition temperature: not applicable

# **Oxidizing properties**

not applicable

Vapour pressure:no data availableDensity (at 20 °C):1,002 g/cm³Bulk density:not applicableWater solubility:completely soluble

(at 20 °C)

## Solubility in other solvents

soluble

Partition coefficient:

Viscosity / dynamic:

viscosity / kinematic:

no data available

no data available

no data available

roo data available

no data available

vapour density:

no data available

according to Regulation (EC) No 1907/2006

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Solvent separation test:

Solvent content:

no data available
no data available

9.2. Other information

Solid content: not applicable

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2. Chemical stability

The product is chemically stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

## 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5. Incompatible materials

None known.

## 10.6. Hazardous decomposition products

None known.

#### **Further information**

Stable under recommended storage conditions.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

#### Acute toxicity

No data is available on the product itself.

CAS No	Chemical name	Chemical name							
	Exposure route	Dose		Species	Source	Method			
877-24-7	Potassium hydrogen phth	Potassium hydrogen phthalate							
	oral	LD50 mg/kg	3200	rat	RTECS				
	dermal		>1000	guinea pig					

### Irritation and corrosivity

No known effect.

#### Sensitising effects

No known effect.

# Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

### STOT-single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

### STOT-repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

# **Aspiration hazard**

No aspiration toxicity classification

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## Specific effects in experiment on an animal

No data is available on the product itself.

#### **Further information**

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

No data is available on the product itself.

### 12.2. Persistence and degradability

No data is available on the product itself.

## 12.3. Bioaccumulative potential

No data is available on the product itself.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
877-24-7	Potassium hydrogen phthalate	-2,73

#### 12.4. Mobility in soil

no data available

### 12.5. Results of PBT and vPvB assessment

no data available

#### 12.6. Other adverse effects

No known effect.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

#### **Disposal recommendations**

In accordance with local and national regulations.

#### List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

### List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

# List of Wastes Code - contaminated packaging

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

### Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

# Land transport (ADR/RID)

### Other applicable information (land transport)

Not subject to transport regulations.

## Inland waterways transport (ADN)

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### Other applicable information (inland waterways transport)

Not tested

## Marine transport (IMDG)

#### Other applicable information (marine transport)

Not subject to transport regulations.

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

### Other applicable information (air transport)

Not subject to transport regulations.

## 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

no data available

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

### **SECTION 15: Regulatory information**

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

### **EU** regulatory information

#### **Additional information**

The product does not need to be labelled in accordance with EC directives or respective national laws.

## National regulatory information

Water contaminating class (D): -- not water contaminating

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

# **SECTION 16: Other information**

#### Changes

Revision: 15.11.2018

Safety datasheet sections which have been updated: 2, 8, 15

Revision: 11.12.2017

Safety datasheet sections which have been updated: 11

Revision: 16.10.2015

Safety datasheet sections which have been updated: 1-16

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

H312 Harmful in contact with skin.
H319 Causes serious eye irritation.

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

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