

**SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Revision Date 18.12.2018

Version 4.10

**SECTION 1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Catalogue No.	109433
Product name	Buffer solution (citric acid/sodium hydroxide/hydrogen chloride), traceable to SRM from NIST and PTB pH 2.00 (20°C) Certipur®
REACH Registration Number	This product is a mixture. REACH Registration Number see section 3.

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

Identified uses	Reagent for analysis For additional information on uses please refer to the Merck Chemicals portal ( <a href="http://www.merckgroup.com">www.merckgroup.com</a> ).
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**1.3 Details of the supplier of the safety data sheet**

Company	Merck KGaA * 64271 Darmstadt * Germany * Phone: +49 6151 72-0
Responsible Department	PM-OQR * e-mail: <a href="mailto:PM_SDS_Supply@merckgroup.com">PM_SDS_Supply@merckgroup.com</a>

**1.4 Emergency telephone number** **Please contact the regional company representation in your country.****SECTION 2. Hazards identification****2.1 Classification of the substance or mixture****REGULATION (EC) No 1272/2008**

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

**2.2 Label elements****Labelling (REGULATION (EC) No 1272/2008)**

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

EUH208 - Contains:

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1

May produce an allergic reaction.

Safety data sheet available on request.

**2.3 Other hazards**

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Catalogue No.	109433
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None known.

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## SECTION 3. Composition/information on ingredients

Chemical nature                      Buffer solution

### 3.1 Substance

Not applicable

### 3.2 Mixture

Remarks	No disclosure requirement according to Regulation (EC) No. 1907/2006.
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## SECTION 4. First aid measures

### 4.1 Description of first aid measures

After inhalation: fresh air. Consult doctor if feeling unwell.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

After eye contact: rinse out with plenty of water. Remove contact lenses.

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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

Allergic reactions

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

No information available.

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## 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*

For this substance/mixture no limitations of extinguishing agents are given.

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

Not combustible.

Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters

*Special protective equipment for firefighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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## *Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## **SECTION 6. Accidental release measures**

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

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

### **6.2 Environmental precautions**

Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10).

Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H<sup>+</sup>, Merck Art. No. 101595). Dispose of properly. Clean up affected area.

### **6.4 Reference to other sections**

Indications about waste treatment see section 13.

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## **SECTION 7. Handling and storage**

### **7.1 Precautions for safe handling**

#### *Advice on safe handling*

Observe label precautions.

#### *Hygiene measures*

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

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

#### *Storage conditions*

Tightly closed.

Recommended storage temperature see product label.

### **7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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

### **8.1 Control parameters**

### **8.2 Exposure controls**

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## Engineering measures

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

See section 7.1.

## Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

### *Eye/face protection*

Safety glasses

### *Hand protection*

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet (>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

### *Other protective equipment*

protective clothing

### *Respiratory protection*

required when vapours/aerosols are generated.

Recommended Filter type: filter E-(P2)

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

## Environmental exposure controls

Do not let product enter drains.

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## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Page 4 of 9

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Form	liquid
Colour	colourless
Odour	odourless
Odour Threshold	Not applicable
pH	2,0 at 25 °C
Melting point	No information available.
Boiling point	No information available.
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapour pressure	No information available.
Relative vapour density	No information available.
Density	1,00 g/cm <sup>3</sup> at 20 °C
Relative density	No information available.
Water solubility	at 20 °C soluble
Partition coefficient: n- octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

## 9.2 Other data

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none

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## SECTION 10. Stability and reactivity

### 10.1 Reactivity

See section 10.3

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

no information available

### 10.6 Hazardous decomposition products

no information available

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## SECTION 11. Toxicological information

### 11.1 Information on toxicological effects

#### Mixture

#### *Acute oral toxicity*

This information is not available.

#### *Acute inhalation toxicity*

This information is not available.

#### *Acute dermal toxicity*

This information is not available.

#### *Skin irritation*

slight irritation

#### *Eye irritation*

slight irritation

#### *Sensitisation*

Mixture may produce an allergic reaction.

#### *Germ cell mutagenicity*

This information is not available.

#### *Carcinogenicity*

This information is not available.

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### *Reproductive toxicity*

This information is not available.

### *Teratogenicity*

This information is not available.

### *Specific target organ toxicity - single exposure*

This information is not available.

### *Specific target organ toxicity - repeated exposure*

This information is not available.

### *Aspiration hazard*

This information is not available.

## **11.2 Further information**

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

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## **SECTION 12. Ecological information**

### **Mixture**

#### **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**

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

#### **12.6 Other adverse effects**

Discharge into the environment must be avoided.

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## **SECTION 13. Disposal considerations**

### *Waste treatment methods*

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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## **SECTION 14. Transport information**

### **Land transport (ADR/RID)**

#### **14.1 - 14.6**

Not classified as dangerous in the meaning of transport regulations.

### **Inland waterway transport (ADN)**

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Not relevant

## **Air transport (IATA)**

### **14.1 - 14.6**

Not classified as dangerous in the meaning of transport regulations.

## **Sea transport (IMDG)**

### **14.1 - 14.6**

Not classified as dangerous in the meaning of transport regulations.

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

Not relevant

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## **SECTION 15. Regulatory information**

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

#### *EU regulations*

Major Accident Hazard Legislation SEVESO III  
Not applicable

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work.

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC not regulated

Substances of very high concern (SVHC) This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq 0.1\%$  (w/w).

#### *National legislation*

Storage class 10 - 13

### **15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out.

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## **SECTION 16. Other information**



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## Training advice

Provide adequate information, instruction and training for operators.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

## Regional representation

This information is given on the authorised Safety Data Sheet for your country.

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*The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.*

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