

**SECTION 1: Identification of the substance or mixture and of the supplier****Product identifier****Trade name:** pH-Pufferlösung 9,22**Synonym:** pH Buffer Solution 9.22**Article number:** CPY20-I**Recommended use of the chemical and restrictions on use** No further relevant information available.**Application of the substance / the mixture** Laboratory chemicals**Supplier's details****Manufacturer/Supplier:**

Endress+Hauser

Conducta GmbH+Co. KG

Dieselstraße 24

D-70839 Gerlingen

**Further information obtainable from:**

Phone: +49 (0)7156 209-10117

E-Mail: MSDS.PCC@endress.com

**Emergency phone number** +27 (0)861 555 777**SECTION 2: Hazard identification****Classification of the substance or mixture**

health hazard

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

**GHS label elements****GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

**Hazard pictograms**

GHS08

**Signal word** Danger**Hazard-determining components of labelling:**

boric acid, disodium salt

**Hazard statements**

May damage fertility. May damage the unborn child.

**Precautionary statements**

Obtain special instructions before use.

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

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

Contains reaction mass 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.

Restricted to professional users.

**Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.

(Contd. on page 2)

—ZA—

Trade name: pH-Pufferlösung 9,22

(Contd. of page 1)

vPvB: Not applicable.

**SECTION 3: Composition or information on ingredients****Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 1330-43-4 EINECS: 215-540-4	boric acid, disodium salt ----- Repr. 1B, H360FD	0.1-1%
CAS: 55965-84-9	reaction mass 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) ----- Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330; Skin Corr. 1C, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Skin Sens. 1A, H317, EUH071 Specific concentration limits: Skin Corr. 1C; H314: C ≥ 0.6 % Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 % Eye Dam. 1; H318: C ≥ 0.6 % Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A; H317: C ≥ 0.0015 %	<0.1%
<b>SVHC</b>		
CAS: 1330-43-4	boric acid, disodium salt	

**Additional information:** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First-aid measures****Description of necessary first-aid measures****After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** Generally the product does not irritate the skin.**After eye contact:** Rinse opened eye for several minutes under running water.**After swallowing:** Rinse out mouth and then drink plenty of water.**Most important symptoms or effects, acute and delayed** No further relevant information available.**Indication of immediate medical attention and special treatment needed, if necessary**

No further relevant information available.

**SECTION 5: Fire-fighting measures****Suitable extinguishing media****Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** no further information**Specific hazards arising from the chemical** No further relevant information available.**Special protective actions for fire fighters** No further relevant information available.**Protective equipment:** No special measures required.**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures** Wear protective clothing.**Environmental precautions:** Dilute with plenty of water.**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.

**Reference to other sections**

No dangerous substances are released.

See Section 7 for information on safe handling.

(Contd. on page 3)

**Trade name: pH-Pufferlösung 9,22**

(Contd. of page 2)

See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## SECTION 7: Handling and storage

**Precautions for safe handling** *Open and handle receptacle with care.*

**Information about fire - and explosion protection:** *Keep respiratory protective device available.*

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

**Storage:**

**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:** *Keep container tightly sealed.*

**Storage class:** 6.1 D

**Specific end use(s)** *No further relevant information available.*

## SECTION 8: Exposure controls or personal protection

**Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

**CAS: 1330-43-4 boric acid, disodium salt**

OEL	Short-term value: 12 mg/m <sup>3</sup> Long-term value: 4 mg/m <sup>3</sup>
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**Additional information:** *The lists valid during the making were used as basis.*

**Exposure controls**

**Appropriate engineering controls** *No further data; see section 7.*

**Individual protection measures, such as personal protective equipment (PPE)**

**General protective and hygienic measures:**

*Keep away from foodstuffs, beverages and feed.*

*Wash hands before breaks and at the end of work.*

*Store protective clothing separately.*

**Respiratory protection:** *Not required.*

**Hand protection**

*Protective gloves and protective skin cream*



*Protective gloves*

*To avoid skin problems reduce the wearing of gloves to the required minimum.*

*Only use chemical-protective gloves with CE-labelling of category III.*

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*No chemical-protective gloves required.*

**Material of gloves**

*Nitrile rubber, NBR*

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*

**Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

**Eye or face protection** *Goggles recommended during refilling*

(Contd. on page 4)

Trade name: pH-Pufferlösung 9,22

(Contd. of page 3)

Body protection: *Protective work clothing***SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****General Information**

Physical state	<i>Fluid</i>
Colour:	<i>Blue</i>
Odour:	<i>Odourless</i>
Odour threshold:	<i>Not determined.</i>
Melting point/freezing point:	<i>Undetermined.</i>
نقطة الغليان أو نقطة الغليان الأولية ونطاق الغليان	<i>100 °C</i>
Flammability	<i>Not applicable.</i>
Upper or lower flammability or explosive limits	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
Flash point:	<i>Not applicable.</i>
Decomposition temperature:	<i>Not determined.</i>
pH at 20 °C	<i>9.2</i>
Viscosity:	
Viscosity	<i>Not determined.</i>
Dynamic:	<i>Not determined.</i>
Solubility	
water:	<i>Fully miscible.</i>
Partition coefficient: n-octanol or water	<i>Not determined.</i>
Vapour pressure at 20 °C:	<i>23 hPa</i>
Vapour density + Relative density	
Density:	<i>Not determined.</i>
Relative density	<i>Not determined.</i>
Vapour density	<i>Not determined.</i>

**Other information**

Appearance:

Form:

*Fluid*

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

Ignition temperature:

*Product is not selfigniting.*

Explosive properties:

*Product does not present an explosion hazard.  
Not determined.*

Solvent content:

Water:

*99.0 %*

Solids content:

*0.0 %*

Change in condition

Evaporation rate

*Not determined.***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*

(Contd. on page 5)

Trade name: pH-Pufferlösung 9,22

(Contd. of page 4)

<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

**Reactivity** No further relevant information available.

**Chemical stability**

**Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

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

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

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

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

## SECTION 11: Toxicological information

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

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

**Reproductive toxicity** May damage fertility. May damage the unborn child.

**Information on other hazards**

**endocrine disrupting potential**

None of the ingredients is listed.

## SECTION 12: Ecological information

**Toxicity**

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

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

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

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

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**Other adverse effects**

**Additional ecological information:**

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

## SECTION 13: Disposal considerations

**Waste treatment methods**

**Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

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

(Contd. on page 6)

Trade name: pH-Pufferlösung 9,22

(Contd. of page 5)

**SECTION 14: Transport information**

UN number	
ADN, IMDG, IATA	Void
UN proper shipping name	
ADR, ADN, IMDG, IATA	Void
Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Void
Packing group	
ADR, IMDG, IATA	Void
Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
UN "Model Regulation":	Void

**\* SECTION 15: Regulatory information**

Safety, health and environmental regulations specific for the product in question

GHS label elements

*The product is classified and labelled according to the Globally Harmonised System (GHS).*

Hazard pictograms



GHS08

Signal word *Danger*

Hazard-determining components of labelling:

*boric acid, disodium salt*

Hazard statements

*May damage fertility. May damage the unborn child.*

Precautionary statements

*Obtain special instructions before use.**Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.**IF exposed or concerned: Get medical advice/attention.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*

Directive 2012/18/EU

Named dangerous substances - ANNEX I *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

CAS: 1330-43-4 | *boric acid, disodium salt*Chemical safety assessment: *A Chemical Safety Assessment has not been carried out.***SECTION 16: Other information***This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

Department issuing SDS: PCC-TWR

Contact: [MSDS.pcc@endress.com](mailto:MSDS.pcc@endress.com)

(Contd. on page 7)

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**Trade name: pH-Pufferlösung 9,22**

(Contd. of page 6)

**Abbreviations and acronyms:**

*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*

*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*

*SVHC: Substances of Very High Concern*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 3: Acute toxicity – Category 3*

*Acute Tox. 2: Acute toxicity – Category 2*

*Skin Corr. 1C: Skin corrosion/irritation – Category 1C*

*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*

*Skin Sens. 1A: Skin sensitisation – Category 1A*

*Repr. 1B: Reproductive toxicity – Category 1B*

*Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1*

*Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1*

**\* Data compared to the previous version altered.**