

**\* 1 Identification of the substance/mixture and of the company/undertaking****Product identifier****Trade name:** pH-Pufferlösung 10,00**Synonym:** pH Buffer Solution 10,00**Article number:** CPY20-K\***Application of the substance / the mixture** Laboratory chemicals**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Endress+Hauser

Conducta GmbH+Co. KG

Dieselstraße 24

D-70839 Gerlingen

**Further information obtainable from:**

Phone: +49 (0)7156 209-117

Fax.: +49 (0)7156 209-222

E-Mail: [conducta\\_service@endress.com](mailto:conducta_service@endress.com)**Emergency telephone number:** Phone: +49(0)6131-19240**\* 2 Hazards identification****Classification of the substance or mixture**

GHS08 Health hazard

Reproductive Toxicity - Category 1B H360-H362 May damage fertility or the unborn child. May cause harm to breast-fed children.

**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 statements**

May damage fertility or the unborn child. May cause harm to breast-fed children.

**Precautionary statements**

Avoid contact during pregnancy and while nursing.

Do not breathe dust/fume/gas/mist/vapours/spray.

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


Store locked up.

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

**Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**\* 3 Composition/information on ingredients****Chemical characterisation: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:			
10043-35-3	boric acid	 Reproductive Toxicity - Category 1B, H360	≤ 1% w/w
SVHC			
10043-35-3	boric acid		

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**Additional information:** *For the wording of the listed risk phrases refer to section 16.*

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## 4 First aid measures

### Description of first aid measures

**General information:** *No special measures required.***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.***Information for doctor:****Most important symptoms and effects, both acute and delayed***No further relevant information available.***Indication of any immediate medical attention and special treatment needed***No further relevant information available.*

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## \* 5 Firefighting measures

### 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:****Special hazards arising from the substance or mixture** *No further relevant information available.***Advice for firefighters****Protective equipment:** *No special measures required.*

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## \* 6 Accidental release measures

**Personal precautions, protective equipment and emergency procedures** *Not required.***Environmental precautions:***Do not allow product to reach sewage system or any water course.**Inform respective authorities in case of seepage into water course or sewage system.**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).***Reference to other sections***No dangerous substances are released.**See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.*

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## \* 7 Handling and storage

**Handling:****Precautions for safe handling** *No special measures required.***Information about fire - and explosion protection:** *No special measures required.***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:** *None.***Specific end use(s)** *No further relevant information available.*

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**\* 8 Exposure controls/personal protection****Additional information about design of technical facilities:** *No further data; see item 7.***Control parameters**

Ingredients with limit values that require monitoring at the workplace:	
<b>10043-35-3 boric acid</b>	
EL	Short-term value: 6 mg/m <sup>3</sup> Long-term value: 2 mg/m <sup>3</sup>
EV	Short-term value: 6 mg/m <sup>3</sup> Long-term value: 2 mg/m <sup>3</sup> inorganic, inhalable

**Additional information:** *The lists valid during the making were used as basis.***Exposure controls****Personal protective equipment:****General protective and hygienic measures:***The usual precautionary measures are to be adhered to when handling chemicals.***Respiratory protection:** *Not required.***Protection of hands:***Protective gloves and protective skin cream**No chemical-protective gloves required.***Material of gloves***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 protection:** *Goggles recommended during refilling***9 Physical and chemical properties**

Information on basic physical and chemical properties	
<b>General Information</b>	
<b>Appearance:</b>	
Form:	Fluid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not determined.
<b>Important information on protection of health and environment, and on safety.</b>	
pH-value at 20 °C:	10
<b>Change in condition</b>	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.

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<b>Ignition temperature:</b>	
<b>Decomposition temperature:</b>	<i>Not determined.</i>
<b>Self-igniting:</b>	<i>Product is not selfigniting.</i>
<b>Danger of explosion:</b>	<i>Product does not present an explosion hazard.</i>
<b>Explosion limits:</b>	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
<b>Vapour pressure at 20 °C:</b>	23 hPa
<b>Density at 20 °C:</b>	1.004 g/cm <sup>3</sup>
Relative density	<i>Not determined.</i>
Vapour density	<i>Not determined.</i>
Evaporation rate	<i>Not determined.</i>
<b>Solubility in / Miscibility with water:</b>	<i>Fully miscible.</i>
<b>Partition coefficient (n-octanol/water):</b>	<i>Not determined.</i>
<b>Viscosity:</b>	
Dynamic:	<i>Not determined.</i>
Kinematic:	<i>Not determined.</i>
<b>Solvent content:</b>	
Organic solvents:	0.0 %
Water:	99.1 %
<b>Solids content:</b>	0.9 %
<b>Other information</b>	<i>No further relevant information available.</i>

## 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.*

## \*11 Toxicological information

### Information on toxicological effects

#### Acute toxicity

<b>LD/LC50 values relevant for classification:</b>		
<b>10043-35-3 boric acid</b>		
Oral	LD50	2660 mg/kg (rat)

#### Primary irritant effect:

**Skin corrosion/irritation** *No irritant effect.***Serious eye damage/irritation** *No irritating effect.***Respiratory or skin sensitisation** *No sensitising effects known.*

#### Additional toxicological information:

*The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.*

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*When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.*

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

*Reproductive Toxicity - Category 1B*

## 12 Ecological information

### Toxicity

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

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

### Behaviour in environmental systems:

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

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

### Additional ecological information:

**General notes:** *Generally not hazardous for water*

### Results of PBT and vPvB assessment

**PBT:** *Not applicable.*

**vPvB:** *Not applicable.*

**Other adverse effects** *No further relevant information available.*

## 13 Disposal considerations

### Waste treatment methods

**Recommendation** *Smaller quantities can be disposed of with household waste.*

### Uncleaned packaging:

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

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

## \*14 Transport information

<b>UN-Number</b> TDG, ADN, IMDG, IATA	<i>Void</i>
<b>UN proper shipping name</b> TDG, ADN, IMDG, IATA	<i>Void</i>
<b>Transport hazard class(es)</b> TDG, ADN, IMDG, IATA Class	<i>Void</i>
<b>Packing group</b> TDG, IMDG, IATA	<i>Void</i>
<b>Environmental hazards:</b>	<i>Not applicable.</i>
<b>Special precautions for user</b>	<i>Not applicable.</i>
<b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	<i>Not applicable.</i>
<b>UN "Model Regulation":</b>	<i>Void</i>

## \*15 Regulatory information

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

### GHS label elements

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

**Hazard pictograms** *GHS08*

**Signal word** *Danger*

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**Hazard statements***May damage fertility or the unborn child. May cause harm to breast-fed children.***Precautionary statements***Avoid contact during pregnancy and while nursing.**Do not breathe dust/fume/gas/mist/vapours/spray.**Wear protective gloves/protective clothing/eye protection/face protection.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.***National regulations:****Waterhazard class:** *Generally not hazardous for water.***Other regulations, limitations and prohibitive regulations****Substances of very high concern (SVHC) according to REACH, Article 57**

10043-35-3 | boric acid

**Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.***\*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 MSDS:** PCC-TWRC**Contact:** MSDS@conducta.endress.com**Abbreviations and acronyms:**

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Reproductive Toxicity - Category 1B: Reproductive toxicity, Hazard Category 1B

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