

1 Identification

Product identifier

Trade name: pH-Pufferlösung 9,00

Synonym: pH Buffer Solution 9.00

Article number: CPY20-G

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 209-10117
E-Mail: MSDS.PCC@endress.com

Emergency telephone number: +1 604 682 5050

2 Hazard identification

Classification of the substance or mixture



GHS08 Health hazard

Reproductive Toxicity - Category 1B H360 May damage fertility or the unborn child.

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
boric acid

Hazard statements

May damage fertility or the unborn child.

Precautionary statements



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

3 Composition/Information on ingredients

Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 1330-43-4	boric acid, disodium salt	 Reproductive Toxicity - Category 1B, H360	0.1-1% *
CAS: 10043-35-3	boric acid	 Reproductive Toxicity - Category 1B, H360	0.1-1% *

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

4 First-aid measures

Description of 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.*

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.*

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

*CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.***For safety reasons unsuitable extinguishing agents:** *no further information***Special hazards arising from the substance or mixture** *No further relevant information available.***Advice for firefighters** *No further relevant information available.***Protective equipment:** *No special measures required.*

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

* 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.*

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.*

8 Exposure controls/ Personal protection

Additional information about design of technical facilities: *No further data; see section 7.*

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Control parameters**Ingredients with limit values that require monitoring at the workplace:****CAS: 1330-43-4 boric acid, disodium salt**

EL	STEL: 6 mg/m ³ TWA: 2 mg/m ³
EV	STEL: 6 mg/m ³ TWA: 2 mg/m ³ inorganic, inhalable

CAS: 10043-35-3 boric acid

EL	STEL: 6 mg/m ³ TWA: 2 mg/m ³
EV	STEL: 6 mg/m ³ TWA: 2 mg/m ³ inorganic, inhalable

Additional information: *The lists valid during the making were used as basis.***Exposure controls****Personal protective equipment:****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.***Protection of hands:***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 protection: *Goggles recommended during refilling***Body protection:** *Protective work clothing***9 Physical and chemical properties****Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Odourless

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Odour threshold:	Not determined.
pH-value at 20 °C:	9
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	100 °C
Flash point:	Not applicable.
Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard. Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density at 20 °C:	1.005 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Water:	99.1 %
Solids content:	0.0 %
Other information	No further relevant information available.

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

LD/LC50 values relevant for classification:		
CAS: 10043-35-3 boric acid		
Oral	LD50	2,660 mg/kg (rat)

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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 shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:***CMR effects (carcinogenity, 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:** *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***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.***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 and the IBC Code***Not applicable.***UN "Model Regulation":***Void***15 Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture***No further relevant information available.*

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GHS label elements

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Hazard pictograms

GHS08

Signal word *Danger***Hazard-determining components of labelling:***boric acid, disodium salt**boric acid***Hazard statements***May damage fertility or the unborn child.***Precautionary statements***Obtain special instructions before use.**Wear protective gloves/protective clothing/eye protection/face protection.**IF exposed or concerned: Get medical advice/attention.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.***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 SDS: PCC-TWR**Contact:** MSDS.pcc@endress.com**Date of the latest revision of the safety data sheet** 06/12/2024 / 5**Abbreviations and acronyms:***ICAO: International Civil Aviation Organisation**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**vPvB: very Persistent and very Bioaccumulative**** Data compared to the previous version altered.**