

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 Inc.
4123 E. La Palma Ave., Suite 200
Anaheim
CA 92807-1813
USA

Information department:

Phone: +49 (0)7156 209-10117
E-Mail: MSDS.PCC@endress.com

Emergency telephone number: 001 18000 222 1222

2 Hazard(s) identification

Classification of the substance or mixture



GHS08 Health hazard

Toxic to Reproduction 1B H360 May damage fertility or the unborn child.

Label elements

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS08

Signal word Danger

Hazard-determining components of labeling:

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.

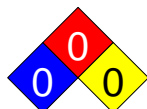
IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

Classification system:

NFPA ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

Trade name: pH-Pufferlösung 9,00

(Contd. of page 1)

HMIS-ratings (scale 0 - 4)

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.



vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

CAS: 1330-43-4	boric acid, disodium salt	 Toxic to Reproduction 1B, H360	0.1-1%
CAS: 10043-35-3	boric acid	 Toxic to Reproduction 1B, H360	0.1-1%

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, extinguishing 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.

(Contd. on page 3)

— USA —

Trade name: pH-Pufferlösung 9,00

(Contd. of page 2)

See Section 13 for disposal information.

Protective Action Criteria for Chemicals

PAC-1:		
CAS: 1330-43-4	boric acid, disodium salt	6 mg/m ³
CAS: 10043-35-3	boric acid	6 mg/m ³
PAC-2:		
CAS: 1330-43-4	boric acid, disodium salt	88 mg/m ³
CAS: 10043-35-3	boric acid	23 mg/m ³
PAC-3:		
CAS: 1330-43-4	boric acid, disodium salt	530 mg/m ³
CAS: 10043-35-3	boric acid	830 mg/m ³

* 7 Handling and storage

Precautions for safe handling Open and handle receptacle with care.**Information about protection against explosions and fires:**

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 receptacle 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 systems: No further data; see section 7.**Control parameters****Components with limit values that require monitoring at the workplace:****CAS: 1330-43-4 boric acid, disodium salt**REL Long-term value: 1 mg/m³
anhydrousTLV Short-term value: 6* mg/m³
Long-term value: 2* mg/m³
*as inhalable fraction, A4**CAS: 10043-35-3 boric acid**TLV Short-term value: 6* mg/m³
Long-term value: 2* mg/m³
*as inhalable fraction, A4**Additional information:** The lists that were valid during the creation 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.

Breathing equipment: Not required.

(Contd. on page 4)

— USA —

Trade name: pH-Pufferlösung 9,00

(Contd. of page 3)

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-labeling 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:	<i>Fluid</i>
Color:	<i>Colorless</i>
Odor:	<i>Odorless</i>
Odor threshold:	<i>Not determined.</i>

pH-value at 20 °C (68 °F): *9***Change in condition**

Melting point/Melting range:	<i>Undetermined.</i>
Boiling point/Boiling range:	<i>100 °C (212 °F)</i>

Flash point: *Not applicable.***Flammability (solid, gaseous):** *Not applicable.***Decomposition temperature:** *Not determined.***Ignition temperature:** *Product is not selfigniting.***Danger of explosion:** *Product does not present an explosion hazard.
Not determined.***Explosion limits:**

Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>

Vapor pressure at 20 °C (68 °F): *23 hPa (17.3 mm Hg)***Density at 20 °C (68 °F):** *1.005 g/cm³ (8.387 lbs/gal)***Relative density** *Not determined.***Vapor density** *Not determined.***Evaporation rate** *Not determined.*

(Contd. on page 5)

— USA —

Trade name: pH-Pufferlösung 9,00

(Contd. of page 4)

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 that are relevant for classification:****CAS: 10043-35-3 boric acid**

Oral LD50 2,660 mg/kg (rat)

Primary irritant effect:**on the skin:** No irritant effect.**on the eye:** No irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information**Toxicity****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Behavior 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.

(Contd. on page 6)

— USA —

Safety Data Sheet

Page 6/8

acc. to OSHA HCS

Printing date 06/12/2024

Version 6

Reviewed on 06/12/2024

Trade name: pH-Pufferlösung 9,00

(Contd. of page 5)

13 Disposal considerations

Waste treatment methods

Recommendation:

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

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

UN-Number

DOT, ADN, IMDG, IATA

Void

UN proper shipping name

DOT, ADN, IMDG, IATA

Void

Transport hazard class(es)

DOT, ADN, IMDG, IATA

Class

Void

Packing group

DOT, IMDG, IATA

Void

Environmental hazards:

Not applicable.

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of

MARPOL73/78 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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Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

CAS: 7732-18-5

water

ACTIVE

CAS: 7447-40-7

potassium chloride

ACTIVE

CAS: 1330-43-4

boric acid, disodium salt

ACTIVE

CAS: 10043-35-3

boric acid

ACTIVE

CAS: 6440-58-0

1,3-Bis (hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione

ACTIVE

Hazardous Air Pollutants

None of the ingredients is listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

(Contd. on page 7)

— USA —

Safety Data Sheet

acc. to OSHA HCS

Page 7/8

Printing date 06/12/2024

Version 6

Reviewed on 06/12/2024

Trade name: pH-Pufferlösung 9,00

(Contd. of page 6)

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenicity categories

EPA (Environmental Protection Agency)

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

I (oral)

CAS: 10043-35-3 boric acid

I (oral)

TLV (Threshold Limit Value)

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

A4

CAS: 10043-35-3 boric acid

A4

MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS08

Signal word Danger

Hazard-determining components of labeling:

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 preparation / last revision 06/12/2024 / 5

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

DOT: US Department of Transportation

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

(Contd. on page 8)

— USA —

Safety Data Sheet

acc. to OSHA HCS

Page 8/8

Printing date 06/12/2024

Version 6

Reviewed on 06/12/2024

Trade name: pH-Pufferlösung 9,00

(Contd. of page 7)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Toxic to Reproduction 1B: Reproductive toxicity – Category 1B

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

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