SECTION 1: Identification

Other means of identification

Trade name: pH-Pufferlösung 9,00
Synonym: *pH Buffer Solution 9.00*

Article number: *CPY20-G*

Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

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

Regional representation:
Endress+Hauser Australia Pty. Ltd.
50 Broughton Road
Artarmon NSW 2064
Australia

Phone: 1300 363 707
Phone: +61 2 8877 7000

Emergency telephone number: *Poison Hotline: 13 11 26*

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SECTION 2: Hazard(s) Identification

Classification of the substance or mixture


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 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.

(Contd. on page 2)

(Contd. of page 1)

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

SECTION 3: Composition and 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*	*Reproductive toxicity – Category 1B, H360*	*0.1-1%*
CAS: 10043-35-3 *EINECS: 233-139-2*	*boric acid*	*Reproductive toxicity – Category 1B, H360*	*0.1-1%*

SVHC	
CAS: 1330-43-4	*boric acid, disodium salt*
CAS: 10043-35-3	*boric acid*

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

*
SECTION 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.*
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.

SECTION 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.*

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

(Contd. on page 3)

(Contd. of page 2)

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 and personal protection

Control parameters

Ingredients with limit values that require monitoring at the workplace:	
CAS: 1330-43-4 boric acid, disodium salt	
WES (Australia)	*Long-term value: 1 mg/m³*

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

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection *Goggles recommended during refilling*

Body protection: *Protective work clothing*

(Contd. on page 4)

(Contd. of page 3)

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

General Information	
Physical state	*Fluid*
Colour:	*Colourless*
Odour:	*Odourless*
Odour threshold:	*Not determined.*
Melting point/freezing point:	*Undetermined.*
Boiling point or initial boiling point and boiling range	*100 °C*
Flammability	*Not applicable.*
Lower and upper explosion limit	
Lower:	*Not determined.*
Upper:	*Not determined.*
Flash point:	*Not applicable.*
Decomposition temperature:	*Not determined.*
pH at 20 °C	*9*
Viscosity:	
Kinematic viscosity	*Not determined.*
Dynamic:	*Not determined.*
Solubility	
water:	*Fully miscible.*
Partition coefficient n-octanol/water (log value)	*Not determined.*
Vapour pressure at 20 °C:	*23 hPa*
Density and/or relative density	
Density at 20 °C:	*1.005 g/cm³*
Relative density	*Not determined.*
Vapour density	*Not determined.*
Particle characteristics	*Not applicable.*

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:	*99.1 %*
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*

(Contd. on page 5)

(Contd. of page 4)

Self-heating substances and mixtures	*Void*
Substances and mixtures, which emit flammable gases in contact with water	*Void*
Oxidising liquids	*Void*
Oxidising solids	*Void*
Organic peroxides	*Void*
Corrosive to metals	*Void*
Desensitised explosives	*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.*

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

Reproductive toxicity *May damage fertility or the unborn child.*
Information on other hazards

Endocrine disrupting properties
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.*

(Contd. on page 6)

(Contd. of page 5)

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

*
SECTION 14: Transport information

UN number or ID number
ADN, IMDG, IATA *Void*
UN proper shipping name
ADG, ADN, IMDG, IATA *Void*
Transport hazard class(es)

ADG, ADN, IMDG, IATA
Class *Void*
Packing group
ADG, IMDG, IATA *Void*
Environmental hazards: *Not applicable.*
Special precautions for user *Not applicable.*
Maritime transport in bulk according to IMO instruments *Not applicable.*
UN "Model Regulation": *Void*

*
SECTION 15: Regulatory information

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

Australian Inventory of Industrial Chemicals	
CAS: 7732-18-5	*water*
CAS: 7447-40-7	*potassium chloride*
CAS: 1330-43-4	*boric acid, disodium salt*
CAS: 10043-35-3	*boric acid*
CAS: 6440-58-0	*1,3-Bis (hydroxymethyl)-5,5-dimethylimidazolidine-2,4-dione*

Standard for the Uniform Scheduling of Medicines and Poisons		
CAS: 7447-40-7	*potassium chloride*	*S4*
CAS: 10043-35-3	*boric acid*	*S4, S5*

Australia: Priority Existing Chemicals
None of the ingredients is listed.

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.
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.

Directive 2012/18/EU
Named dangerous substances - ANNEX I *None of the ingredients is listed.*

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(Contd. of page 6)

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*
CAS: 10043-35-3	*boric acid*

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*
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
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 – Category 1B
*** Data compared to the previous version altered.**