

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**
Version: **1.0 en**

date of compilation: 2015-07-09

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Identification of the substance	BUFFER SOLUTION pH 9,00 ± 0,02 (20 °C)
Article number	A519
Registration number (REACH)	not relevant (mixture)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture and uses advised against	laboratory chemical
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1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co KG
Schoemperlenstr. 3-5
D-76185 Karlsruhe
Germany

Telephone: +49 (0) 721 - 56 06 0

Telefax: +49 (0) 721 - 56 06 149

e-mail: sicherheit@carlroth.de

Website: www.carlroth.de

Competent person responsible for the safety data sheet	: Department Health, Safety and Environment
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e-mail (competent person)	: sicherheit@carlroth.de
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1.4 Emergency telephone number

Emergency information service	Poison Centre Munich: +49/(0)89 19240
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

not required

Signal word not required

2.3 Other hazards

There is no additional information.

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture

This mixture does not meet the criteria for classification.

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
boric acid, crude natural, containing notmore than 85 per cent of H3BO3 calculated onthe dry weight	CAS No 10043-35-3 EC No 233-139-2 Index No 005-007-00-2	< 2,5	Repr. 1B / H360FD	

Substance of Very High Concern (SVHC)

Name of substance	CAS No	Listed in	Remarks
boric acid, crude natural, containing notmore than 85 per cent of H3BO3 calculated onthe dry weight	10043-35-3	Candidate list	Repr. A57c

Legend

Candidate list Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV

Repr. A57c Toxic for reproduction (article 57c)

SECTION 4: First aid measures

4.1 Description of first aid measures



General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In case of skin irritation, consult a physician.

Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings
water spray, foam, dry extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Non-combustible.

Hazardous combustion products

In case of fire may be liberated: May produce toxic fumes of carbon monoxide if burning.

5.3 Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No special measures are necessary.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece).

Other information relating to spills and releases

Place in appropriate containers for disposal.

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures are necessary.

Advice on general occupational hygiene

Do not to eat, drink and smoke in work areas. Wash hands before breaks and after work.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Not required.

• Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

not relevant

8.2 Exposure controls

Individual protection measures (personal protective equipment)



Eye/face protection

Use safety goggle with side protection.

Skin protection

• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

- **type of material**

NBR (Nitrile rubber)

- **material thickness**

>0,11 mm.

- **breakthrough times of the glove material**

>480 minutes (permeation: level 6)

- **other protection measures**

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

Usually no personal respiratory protection necessary.

Environmental exposure controls

Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid (fluid)
Colour	colourless
Odour	odourless
Odour threshold	No data available

Other physical and chemical parameters

pH (value)	9
Melting point/freezing point	0 °C
Initial boiling point and boiling range	100 °C
Flash point	not determined
Evaporation rate	no data available
Flammability (solid, gas)	not relevant (fluid)
<u>Explosive limits</u>	
• lower explosion limit (LEL)	this information is not available
• upper explosion limit (UEL)	this information is not available
Explosion limits of dust clouds	not relevant
Vapour pressure	23 hPa at 20 °C
Density	1,006 g/cm ³
Vapour density	This information is not available.

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

Bulk density	Not applicable
Relative density	Information on this property is not available.
<u>Solubility(ies)</u>	
Water solubility	miscible in any proportion
<u>Partition coefficient</u>	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	Information on this property is not available.
Viscosity	not determined
Explosive properties	none
Oxidising properties	none

9.2 Other information

There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

SECTION 11: Toxicological information

11.1 Information on toxicological effects

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes slight to moderate irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

- **Specific target organ toxicity - single exposure**

Shall not be classified as a specific target organ toxicant (single exposure).

- **Specific target organ toxicity - repeated exposure**

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

- **If swallowed**

data are not available

- **If inhaled**

data are not available

- **If on skin**

data are not available

Other information

None.

SECTION 12: Ecological information

12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
boric acid, crude natural, containing not more than 85 per cent of H ₃ BO ₃ calculated on the dry weight	10043-35-3	EC50	133 mg/l	daphnia magna	48 hours

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
boric acid, crude natural, containing not more than 85 per cent of H ₃ BO ₃ calculated on the dry weight	10043-35-3	LC50	50 mg/l	rainbow trout (Oncorhynchus mykiss)	96 hours

12.2 Process of degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
boric acid, crude natural, containing not more than 85 per cent of H ₃ BO ₃ calculated on the dry weight	10043-35-3		0,757	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Slightly hazardous to water.

Endocrine disrupting potential

Name of substance	CAS No	Combined category	Human health category	Wildlife category
boric acid, crude natural, containing not more than 85 per cent of H ₃ BO ₃ calculated on the dry weight	10043-35-3	CAT1	CAT1	CAT2

Legend

CAT1 Category 1 - evidence of endocrine disruption in at least one species using intact animals

CAT2 Category 2 - at least some in vitro evidence of biological activity related to endocrine disruption

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Consult the appropriate local waste disposal expert about waste disposal.

safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

Sewage disposal-relevant information

Do not empty into drains.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

SECTION 14: Transport information

- | | | |
|------|----------------------------|--|
| 14.1 | UN number | (not subject to transport regulations) |
| 14.2 | UN proper shipping name | not relevant |
| 14.3 | Transport hazard class(es) | not relevant |
| | Class | - |
| 14.4 | Packing group | not relevant |
| 14.5 | Environmental hazards | none (non-environmentally hazardous acc. to the dangerous goods regulations) |
- 14.6 Special precautions for user**
There is no additional information.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**
The cargo is not intended to be carried in bulk.
- 14.8 Information for each of the UN Model Regulations**
- **Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**
Not subject to ADR, RID and ADN.
 - **International Maritime Dangerous Goods Code (IMDG)**
Not subject to IMDG.

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Relevant provisions of the European Union (EU)**
- **Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC)**
None of the ingredients are listed.
 - **Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS)**
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safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU



Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

- **Regulation 850/2004/EC on persistent organic pollutants (POP)**

None of the ingredients are listed.

- **Restrictions according to REACH, Annex XVII**

None of the ingredients are listed.

- **List of substances subject to authorisation (REACH, Annex XIV)**

Name acc. to inventory	CAS No	Listed in	Remarks
boric acid	10043-35-3	Candidate list	Repr. A57c

Legend

Candidate list

Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV

Repr. A57c

Toxic for reproduction (article 57c)

- **Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)**

VOC content 0 %

- **Directive on industrial emissions (VOCs, 2010/75/EU)**

VOC content 0 %

- **Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

None of the ingredients are listed.

- **Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

None of the ingredients are listed.

- **Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

None of the ingredients are listed.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
BCF	BioConcentration Factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
COD	chemical oxygen demand
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)

safety data sheet

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Buffer solution pH 9,00 ±0,02 (20 °C) buffer solution, ready to use

article number: **A519**

Abbr.	Descriptions of used abbreviations
IMDG	International Maritime Dangerous Goods Code
index No	the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
log KOW	n-octanol/water
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	reproductive toxicity
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

List of relevant phrases (code and full text as stated in chapter 2 and 3)

not relevant.

Code	Text
H360FD	may damage fertility. May damage the unborn child

Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.