

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Buffer pH10 Blue (250-210-501)**

Revision: 17.12.2025

Product code: AC18.07145

Page 1 of 11

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Buffer pH10 Blue (250-210-501)

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Reagents and laboratory chemicals  
Only for laboratory and analysis purposes.

**Uses advised against**

Do not use for private purposes (household).

**1.3. Details of the supplier of the safety data sheet****Details of the supplier of the safety data sheet**

Company name: AnalytiChem Services, Unipessoal, Lda  
Street: Rua de Júlio Dinis 676 7º  
Place: P-4050-320 Porto  
Telephone: +351 226002917  
E-mail: info@analytichem.com  
Contact person: SDS service department  
E-mail: SDS@analytichem.com  
Internet: www.analytichem.com  
Responsible Department: SDS service department

**Supplier or manufacturer details**

Company name: AnalytiChem Canada Inc.  
Street: Québec, CANADA  
21800 Clark Graham Ave  
Place: CDN-H9X 4B6 Baie-D'Urfé  
Telephone: +1 (800) 361-6820 Telefax: +1 (800) 253-5549  
E-mail: info@analytichem.com  
Contact person: SDS service department  
E-mail: SDS@analytichem.com  
Internet: www.analytichem.com  
Responsible Department: AnalytiChem:  
EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20  
EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200  
EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848  
UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500  
USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378  
Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701  
Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333  
+353 1 901 4670 (CHEMTREC)

**1.4. Emergency telephone number:****Further Information**

No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Buffer pH10 Blue (250-210-501)

Revision: 17.12.2025

Product code: AC18.07145

Page 2 of 11

## SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard statements**

EUH210 Safety data sheet available on request.

**2.3. Other hazards**

No data available

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures****Chemical characterization**

Mixtures in aqueous solution

**Relevant ingredients**

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
12045-78-2	Potassium Tetraborate			< 1 %
	212-769-1		01-2119970730-37	
	Repr. 2; H361fd			

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
12045-78-2	212-769-1	Potassium Tetraborate	< 1 %
	inhalation: LC50 = > 2,04 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2500 mg/kg		

**Further Information**

No data available

## SECTION 4: First aid measures

**4.1. Description of first aid measures****General information**

No data available

**After inhalation**

Provide fresh air.

**After contact with skin**

Wash immediately with: Water

Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Buffer pH10 Blue (250-210-501)**

Revision: 17.12.2025

Product code: AC18.07145

Page 3 of 11

**After ingestion**

Rinse mouth immediately and drink plenty of water.  
Call a physician immediately.

**4.2. Most important symptoms and effects, both acute and delayed**

No data available

**4.3. Indication of any immediate medical attention and special treatment needed**

No data available

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

No data available

**5.2. Special hazards arising from the substance or mixture**

Non-combustible liquids

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

No data available

**For non-emergency personnel**

Provide adequate ventilation.  
Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Remove persons to safety.  
Emergency procedures  
Consult an expert  
Do not breathe vapour/aerosol.

**For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

**6.2. Environmental precautions**

Discharge into the environment must be avoided.

**6.3. Methods and material for containment and cleaning up****For containment**

Wipe up with absorbent material (eg. cloth, fleece).

**For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

**Other information**

No data available

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Buffer pH10 Blue (250-210-501)**

Revision: 17.12.2025

Product code: AC18.07145

Page 4 of 11

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Do not breathe vapour/aerosol.

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Advice on general occupational hygiene**

Wash contaminated clothing prior to re-use.

Do not breathe vapour/aerosol.

Avoid contact with skin, eyes and clothes.

**Further information on handling**

Wash contaminated clothing before reuse.

Wash hands before breaks and after work.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed.

**Hints on joint storage**

No data available /National regulatory information

**Further information on storage conditions**

Store in a dry place.

**7.3. Specific end use(s)**

Laboratory chemicals

Only for laboratory and analysis purposes.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Buffer pH10 Blue (250-210-501)

Revision: 17.12.2025

Product code: AC18.07145

Page 5 of 11

## DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
12045-78-2	Potassium Tetraborate			
Worker DNEL, long-term		inhalation	systemic	7,8 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	7,8 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	13,6 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	13,6 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	367,7 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	3,9 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	systemic	3,9 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	13,6 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	13,6 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	185,6 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,92 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,92 mg/kg bw/day

## PNEC values

CAS No	Substance	Value
12045-78-2	Potassium Tetraborate	
Freshwater		2,02 mg/l
Freshwater (intermittent releases)		13,7 mg/l
Marine water		2,02 mg/l
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		5,4 mg/kg

## Additional advice on limit values

Observe in addition any national regulations!

**8.2. Exposure controls****Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

goggles

**Hand protection**

Tested protective gloves must be worn. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Wear suitable protective clothing.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Buffer pH10 Blue (250-210-501)**

Revision: 17.12.2025

Product code: AC18.07145

Page 6 of 11

Wash hands before breaks and after work.

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

**Thermal hazards**

No data available

**Environmental exposure controls**

Discharge into the environment must be avoided.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	blue	
Odour:	odourless	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability:		No data available
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		No data available
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		No data available
Viscosity / kinematic:		No data available
Water solubility:		No data available
Solubility in other solvents		
No data available		
Dissolution rate:		No data available
Partition coefficient n-octanol/water:		No data available
Dispersion stability:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density:		No data available
Relative density:		No data available
Bulk density:		No data available
Relative vapour density:		No data available
Particle characteristics:		No data available

**9.2. Other information****Information with regard to physical hazard classes**

Explosive properties	
No data available	
Sustained combustibility:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Oxidizing properties	
No data available	

**Other safety characteristics**

Evaporation rate:	No data available
-------------------	-------------------

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Buffer pH10 Blue (250-210-501)

Revision: 17.12.2025

Product code: AC18.07145

Page 7 of 11

Solvent separation test:	No data available
Solvent content:	0%
Solid content:	0%
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	
Viscosity / dynamic:	No data available
Flow time:	No data available

**Further Information**

No data available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No data available

**10.4. Conditions to avoid**

No data available

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

No data available

**Further information**

No data available

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

**Acute toxicity**

Based on available data, the classification criteria are not met.

**ATEmix calculated**

ATE (oral) &gt; 5000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
12045-78-2	Potassium Tetraborate				
	oral	LD50 > 2500 mg/kg	Rat	Study report (1996)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1985)	other: This study was carried out to com
	inhalation (4 h) dust/mist	LC50 > 2,04 mg/l	Rat	Study report (1994)	OECD Guideline 403

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Buffer pH10 Blue (250-210-501)**

Revision: 17.12.2025

Product code: AC18.07145

Page 8 of 11

**Irritation and corrosivity**

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Information on likely routes of exposure**

There are no data available on the mixture itself.

**Specific effects in experiment on an animal**

There are no data available on the mixture itself.

**Additional information on tests**

There are no data available on the mixture itself.

**Practical experience**

There are no data available on the mixture itself.

**11.2. Information on other hazards****Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**Other information**

There are no data available on the mixture itself.

**Further information**

There are no data available on the mixture itself.

**SECTION 12: Ecological information****12.1. Toxicity**

Based on available data, the classification criteria are not met.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Buffer pH10 Blue (250-210-501)

Revision: 17.12.2025

Product code: AC18.07145

Page 9 of 11

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
12045-78-2	Potassium Tetraborate					
	Acute fish toxicity	LC50 74 mg/l	96 h	Limanda limanda	Publication (1985)	The acute toxicity of boron has been stu
	Acute algae toxicity	ErC50 66 mg/l	72 h	Phaeodactylum tricornutum	Study report (2011)	ISO 10253
	Acute crustacea toxicity	EC50 133 mg/l	48 h	Daphnia magna	Environ. Toxicol. Chem., 3, #1, 89-94 (1	other: ASTM Standard E 729-80
	Fish toxicity	NOEC 5,6 mg/l	34 d	Danio rerio	Study report (2000)	OECD Guideline 210
	Algae toxicity	NOEC >= 100 mg/l	10 d	Agmenellum quadruplicatum	J. Fish. Res. Board Can., 32, #12, 2487-	Axenic cultures of 19 species were chose
	Crustacea toxicity	NOEC 33,1 mg/l	28 d	Americamysis bahia	Study report (2011)	EPA OPPTS 850.1350
	Acute bacteria toxicity	EC50 > 175 mg/l ( )	3 h	Activated sludge	Study report (2000)	OECD Guideline 209

**12.2. Persistence and degradability**

There are no data available on the mixture itself.

**12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

**BCF**

CAS No	Chemical name	BCF	Species	Source
12045-78-2	Potassium Tetraborate	0,558	Oncorhynchus nerka	Water Research Vol.

**12.4. Mobility in soil**

There are no data available on the mixture itself.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

There are no data available on the mixture itself.

**Further information**

Discharge into the environment must be avoided.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation.

**Contaminated packaging**

Dispose of contents/container to an appropriate recycling or disposal facility.

**SECTION 14: Transport information**

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**Buffer pH10 Blue (250-210-501)**

Revision: 17.12.2025

Product code: AC18.07145

Page 10 of 11

**Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

**14.7. Maritime transport in bulk according to IMO instruments**

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 75

**National regulatory information**

Water hazard class (D): 3 - highly hazardous to water

**Additional information**

No data available

**SECTION 16: Other information****Abbreviations and acronyms**

Repr. 2: Reproductive toxicity, hazard category 2

**Relevant H and EUH statements (number and full text)**

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

EUH210 Safety data sheet available on request.

**Further Information**

Provide appropriate information, instructions and training to users

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.

The information is based on the present level of our knowledge. It does not, however, give assurance of product

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Buffer pH10 Blue (250-210-501)**

Revision: 17.12.2025

Product code: AC18.07145

Page 11 of 11

properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

---

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*