

**BUFFER SOLUTION pH 9.00 20 °C**

Date 23.12.2022

Previous date: 15.10.2017

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier****1.1.1 Commercial Product Name**

BUFFER SOLUTION pH 9.00 20 °C

**1.1.2 Product code**FF177 500 ML; FF178 1 L; FF179 5 L  
UFI J6G0-10P1-S00J-X4RM**1.2 Relevant identified uses of the substance or mixture and uses advised against****1.2.1 Recommended use**

Laboratory chemical

**1.3 Details of the supplier of the safety data sheet****1.3.1 Supplier**

Oy FF-Chemicals Ab

**Street address**

Teollisuustie 4

**Postcode and post office**

FI-90830 HAUKIPUDAS

Finland

**Telephone**

+358 8 5563 193

**Telefax**

+358 8 5563 194

**Business ID**

05851808

**Email**

ffc@ff-chemicals.fi

**1.4 Emergency telephone number****1.4.1 Telephone number, name and address**

Please contact the Emergency Centre in your own country.

**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****1272/2008 (CLP)**

Repr. 1B, H360

**2.2 Label elements****1272/2008 (CLP)**

GHS08

Signal word

**Danger****Hazard Statements**

H360

May damage fertility. Suspected of damaging the unborn child.

**Precautionary Statements**

P202

Do not handle until all safety precautions have been read and understood.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313

IF exposed or concerned: Get medical advice/attention.

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Hazardous components**

CAS/EC and Reg.number	EINECS	Chemical name of the substance	Concentration	Classification
10043-35-3	233-139-2	Boric acid	< 0.5 %	Repr. 1B, H360FD
1310-73-2	215-185-5	Sodium hydroxide	< 0.5 %	Skin Corr. 1A, H314

**3.3 Other information**

The full text of hazard statements are given in chapter 16.

**BUFFER SOLUTION pH 9.00 20 °C**

Date 23.12.2022

Previous date: 15.10.2017

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

Remove patient from exposure. Take off contaminated clothing.

**4.1.2 Inhalation**

Move into fresh air.

**4.1.3 Skin contact**

Flush skin immediately with plenty of water.

**4.1.4 Eye contact**

Rinse immediately with plenty of water also under eye lids for 15 minutes. Contact an ophthalmologist if irritation persists.

**4.1.5 Ingestion**

If conscious, rinse mouth with water. Do NOT induce vomiting. Give immediately water to drink (no more than 2 glasses). Call a POISON CENTER or doctor/physician.

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

May damage fertility. Suspected of damaging the unborn child.

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

Treat symptomatically.

**5. FIREFIGHTING MEASURES****5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Choose extinguishing media suitable for surrounding materials.

**5.1.2 Extinguishing media which must not be used for safety reasons**

For this substance/mixture no limitations of extinguishing agents are given.

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

Not combustible.

**5.3 Advice for firefighters**

Wear chemical protective suit and pressurized respirator.

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Evacuate the contaminated area. Wear personal protective equipment. Ventilate the area.

**6.2 Environmental precautions**

Prevent flowing into sewers.

**6.3 Methods and materials for containment and cleaning up**

Absorb in suitable absorption material and collect for disposal. Clean surfaces and ventilate the area.

**6.4 Reference to other sections**

For disposal see section 13.

**7. HANDLING AND STORAGE****7.1 Precautions for safe handling**

Handle with good practice and according to safety instructions. Ensure adequate ventilation.

**7.2 Conditions for safe storage, including any incompatibilities**

Store at room temperature in the original container.

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

**BUFFER SOLUTION pH 9.00 20 °C**

Date 23.12.2022

Previous date: 15.10.2017

- 8.1.1 Threshold limits**  
1310-73-2 Sodium hydroxide ceiling value
- 8.1.2 Other information on limit values**  
Finnish limit values above.
- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls**  
Handle with good practice and according to safety instructions. Wash hands after working.
- 8.2.2 Individual protection measures**
- 8.2.2.1 Respiratory protection**  
Respiratory protection when vapours or mist may be discharged in work place air.
- 8.2.2.2 Hand protection**  
Protective gloves EN 374
- 8.2.2.3 Eye/face protection**  
Safety glasses EN 166
- 8.2.2.4 Skin protection**  
Laboratory coat
- 8.2.3 Environmental exposure controls**  
Prevent flowing into sewers.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 Important Health Safety and Environmental Information**
- 9.1.1 Appearance**  
Liquid, clear
- 9.1.2 Odour** Odourless
- 9.1.3 Odour threshold** No data available.
- 9.1.4 pH** 9.00
- 9.1.5 Melting point/freezing point** No data available.
- 9.1.6 Initial boiling point and boiling range** No data available.
- 9.1.7 Flash point** Not applicable.
- 9.1.8 Evaporation rate** No data available.
- 9.1.9 Flammability (solid, gas)** The product is not flammable.
- 9.1.10 Explosive properties**
- 9.1.10.1 Lower explosion limit** No data available.
- 9.1.10.2 Upper explosion limit** No data available.
- 9.1.11 Vapour pressure** No data available.
- 9.1.12 Vapour density** No data available.
- 9.1.13 Relative density** 1,0087 kg/l
- 9.1.14 Solubility(ies)**
- 9.1.14.1 Water solubility** Soluble in water.
- 9.1.15 Partition coefficient: n-octanol/water** No data available.
- 9.1.16 Auto-ignition temperature** No data available.
- 9.1.17 Decomposition temperature** No data available.
- 9.1.18 Viscosity** No data available.
- 9.1.19 Explosive properties** Not explosive
- 9.1.20 Oxidising properties** No data available.
- 9.2 Other information**  
No data available.

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Date 23.12.2022

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**10. STABILITY AND REACTIVITY**

- 10.1 Reactivity**  
The product is chemically stable under standard ambient conditions.
- 10.2 Chemical stability**  
The product is chemically stable under standard ambient conditions.
- 10.3 Possibility of hazardous reactions**  
Not reported when stored and handled according to regulations.
- 10.4 Conditions to avoid**  
Excess heat.
- 10.5 Incompatible materials**  
No information available.
- 10.6 Hazardous decomposition products**  
No information available.

**11. TOXICOLOGICAL INFORMATION**

- 11.1 Information on toxicological effects**
- 11.1.1 Acute toxicity**  
Based on available data, the classification criteria are not met.
- 11.1.2 Irritation and corrosion**  
Based on available data, the classification criteria are not met.
- 11.1.3 Sensitisation**  
Based on available data, the classification criteria are not met.
- 11.1.4 Subacute, subchronic and prolonged toxicity**  
May damage fertility. Suspected of damaging the unborn child.
- 11.1.5 STOT-single exposure**  
Based on available data, the classification criteria are not met.
- 11.1.6 STOT-repeated exposure**  
Based on available data, the classification criteria are not met.
- 11.1.7 Aspiration hazard**  
Based on available data, the classification criteria are not met.
- 11.1.8 Other information on acute toxicity**  
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**12. ECOLOGICAL INFORMATION**

- 12.1 Toxicity**
- 12.1.1 Aquatic toxicity**  
Based on available data, the classification criteria are not met.
- 12.2 Persistence and degradability**
- 12.2.1 Biodegradation**  
No data available.
- 12.3 Bioaccumulative potential**  
No data available.
- 12.4 Mobility in soil**  
No data available.
- 12.5 Results of PBT and vPvB assessment**  
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**BUFFER SOLUTION pH 9.00 20 °C**

Date 23.12.2022

Previous date: 15.10.2017

**12.6 Other adverse effects**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.  
Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

**14. TRANSPORT INFORMATION**

- |                                                                                      |                                                                      |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>14.1 UN number</b>                                                                | Not dangerous goods                                                  |
| <b>14.2 UN proper shipping name</b>                                                  | Not dangerous goods                                                  |
| <b>14.3 Transport hazard class(es)</b>                                               | Not dangerous goods                                                  |
| <b>14.4 Packing group</b>                                                            | Not dangerous goods                                                  |
| <b>14.5 Environmental hazards</b>                                                    | Not dangerous goods                                                  |
| <b>14.6 Special precautions for users</b>                                            | Not classified as dangerous in the meaning of transport regulations. |
| <b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable.                                                      |

**15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

The safety data sheet is in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Take note of Dir 94/33/EC on the protection of young people at work.

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.  
Concentrations known to be harmful (also known as HTP values) Publication HTP Values 2020 Ministry of Social Affairs and Health

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out.

**16. OTHER INFORMATION****16.1 Additions, Deletions, Revisions**

1.1.2, 1.4.1., 2, 3.2, 4.2, 7.3, 11.1.4, 12.6, 13.1, 15.1, 16.1

**16.3 Key literature references and sources for data**

ECHA C&L Inventory

**16.4 Classification procedure**

Information of constituents. Harmonized classification according to CLP regulation.

**16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements**

H314 Causes severe skin burns and eye damage.

H360 May damage fertility. Suspected of damaging the unborn child.

**16.6 Training advice**

Provide adequate information, instruction and training for operators.

**16.8 Additional information available from:**

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The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.