Buffer solution NA pH 2.00 (+/-0.02) natural K1520BG

YOKOGAWA

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 18-5-2009    Revision date: 14-1-2020    Supersedes version of: 19-10-2018    Version: 15.0

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

1.1. Product identifier
Product form: Mixture
Product name: Buffer solution NA pH 2.00 (+/-0.02) natural K1520BG
Product code: 79901772
Synonyms: K1520BG

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

1.2.1. Relevant identified uses
Main use category: Professional use
Use of the substance/mixture: Laboratory chemicals

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Yokogawa Process Analyzers Europe B.V.
Euroweg 2
3825 HD Amersfoort - The Netherlands
T +31 (0)88-4641000

1.4. Emergency telephone number

<table>
<thead>
<tr>
<th>Country</th>
<th>Organisation/Company</th>
<th>Address</th>
<th>Emergency number</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>Nationaal Vergiftigingen Informatie Centrum</td>
<td>Huispostnummer B.00.118 Postbus 85500 3508 GA Utrecht</td>
<td>+31 30 274 88 88</td>
<td>Only for the purpose of informing medical personnel in cases of acute intoxications</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

- Skin corrosion/irritation, Category 1: H314
- Serious eye damage/eye irritation, Category 1: H318

Full text of H statements: see section 16

2.2. Label elements

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

Hazard pictograms (CLP): GHS05

Signal word (CLP): Danger

Hazard statements (CLP): P280 - Wear protective clothing/eye protection/face protection, protective gloves. 
P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor, a POISON CENTER. 
P303+P361+P333+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor, a POISON CENTER. 
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor, a POISON CENTER. 
P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

Other hazards not contributing to the classification: None under normal conditions.
SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium chloride for analysis</td>
<td>(CAS-No.) 7647-14-5 (EC-No.) 231-598-3</td>
<td>≥ 5 – &lt; 10</td>
<td>Not classified</td>
</tr>
<tr>
<td>Ortho-Phosphoric acid &gt;85%, extra pure substance with a Community workplace exposure limit</td>
<td>(CAS-No.) 7664-38-2 (EC-No.) 231-633-2</td>
<td>&lt; 1</td>
<td>Skin Corr. 1B, H314 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general: Call a physician immediately.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion: Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact: Burns.
Symptoms/effects after eye contact: Serious damage to eyes.
Symptoms/effects after ingestion: Burns.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3. Advice for firefighters
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, spray, vapours.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, spray, vapours. Wear personal protective equipment.

14-1-2020 (Version: 15.0)
Buffer solution NA pH 2.00 (+/-0.02) natural K1520BG

Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store locked up. Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Ortho-Phosphoric acid &gt;85%, extra pure (7664-38-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU - Occupational Exposure Limits</td>
</tr>
<tr>
<td>Local name: Orthophosphoric acid</td>
</tr>
<tr>
<td>IOELV TWA (mg/m³): 1 mg/m³</td>
</tr>
<tr>
<td>IOELV STEL (mg/m³): 2 mg/m³</td>
</tr>
<tr>
<td>Regulatory reference: COMMISSION DIRECTIVE 2000/39/EC</td>
</tr>
<tr>
<td>Netherlands - Occupational Exposure Limits</td>
</tr>
<tr>
<td>Local name: Fosforzuur</td>
</tr>
<tr>
<td>Grenswaarde TGG 8H (mg/m³): 1 mg/m³</td>
</tr>
<tr>
<td>Grenswaarde TGG 15MIN (mg/m³): 2 mg/m³</td>
</tr>
<tr>
<td>Regulatory reference: Arbeidsomstandighedenregeling 2020</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Hand protection:
Nitrile rubber with recommended material thickness of 0,11 mm and a penetration time of glove material (Penetration time)> 480 min, EN ISO 374.

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Liquid.
Colour: Clear.
Odour: Characteristic.
Buffer solution NA pH 2.00 (+/-0.02) natural K1520BG
Safety Data Sheet
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Odour threshold: No data available
pH: 2
Relative evaporation rate (butylacetate=1): No data available
Melting point: Not applicable
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): Not applicable
Vapour pressure: 23 hPa 20 °C
Relative vapour density at 20 °C: No data available
Relative density: No data available
Density: 1,06 g/cm³
Solubility: soluble in water.
Partition coefficient n-octanol/water (Log Pow): No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Explosive limits: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity (oral): Not classified
Acute toxicity (dermal): Not classified
Acute toxicity (inhalation): Not classified

Ortho-Phosphoric acid >85%, extra pure (7664-38-2)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>2600 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>2740 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (Vapours - mg/l/4h)</td>
<td>&gt; 0,21 mg/l/4h</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin burns. pH: 2
Serious eye damage/irritation: Causes serious eye damage. pH: 2
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
**Buffer solution NA pH 2.00 (+/-0.02) natural K1520BG**

Safety Data Sheet  
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Not rapidly degradable

**Ortho-Phosphoric acid >85%, extra pure (7664-38-2)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>138 mg/l mosquito fish</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>&gt; 100 mg/l</td>
</tr>
<tr>
<td>ErC50 (algae)</td>
<td>&gt; 100 mg/l 48 h</td>
</tr>
<tr>
<td>NOEC chronic algae</td>
<td>&gt; 100 mg/l 72 h</td>
</tr>
<tr>
<td>Threshold limit other aquatic organisms</td>
<td>270 mg/l Bacteria, Live sludge</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

No additional information available

**Ortho-Phosphoric acid >85%, extra pure (7664-38-2)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient n-octanol/water (Log Pow)</td>
<td>-0,77</td>
</tr>
</tbody>
</table>

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

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

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
14.5. Environmental hazards

<table>
<thead>
<tr>
<th></th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
</tr>
</thead>
</table>
No supplementary information available

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations
Netherlands
SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation, Category 1, Sub-Category 1B</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage.</td>
</tr>
</tbody>
</table>

SDS EU (REACH Annex II)
This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.