

* 1 Identification of the substance/preparation and of the company/undertaking

- **Product details**
- **Trade name:** Buffer solution pH 1,68 +/-0,02, green blue
- **Article number:** 79901751
- **Application of the substance / the preparation** Laboratory use
- **Manufacturer/Supplier:**
Yokogawa Europe B.V.
Euroweg 2
3825 HD Amersfoort
The Netherlands
Phone : +31 (0)88-4641917
Fax: +31 (0)88-4641116
Visit us at www.yokogawa.com
- **Further information obtainable from:** Product safety department.
- **Information in case of emergency:** Yokogawa, Phone : +31 (0)88-4641917


2 Hazards identification

- **Hazard description:** Not applicable.
- **Information concerning particular hazards for human and environment:** Not applicable.
- **GHS label elements** Void

* 3 Composition/information on ingredients

- **Chemical characterization:**
- **CAS No. Description**
7732-18-5 water, distilled, conductivity or of similar purity
- **Identification number(s)**
- **EINECS Number:** 231-791-2
- **Chemical characterization**

- Dangerous components:

CAS: 6100-20-5 EINECS: 204-874-6	Kaliumtrihydrogenphosphat	 Xn; R 21/22 Danger:  3.1.O/3, 3.1.D/3	≤ 2.5%
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4 First aid measures

- **General information:** No special measures required.
- **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:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Additional information:** No dangerous substances are released.

7 Handling and storage

- **Handling:**
- **Information for safe handling:** No special measures required.

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- **Information about fire - and explosion protection:** No special measures required.
- **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:** None.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- Ingredients with limit values that require monitoring at the workplace:

Substance is not listed.

Not required.

- **Additional information:** The lists valid during the making were used as basis.

- Personal protective equipment:

- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection:

Not required.

- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- Material of gloves

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.

- Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- Eye protection:

Goggles recommended during refilling

* 9 Physical and chemical properties

- General Information

Form: Fluid
Colour: Bluish-green
Odour: Characteristic

- Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

- **Flash point:** Not applicable.

- **Danger of explosion:** Product does not present an explosion hazard.

- **Vapour pressure at 20 °C:** 23 hPa

- **Density at 20 °C:** 1 g/cm³

- **Solubility in / Miscibility with water:** Fully miscible.

- **pH-value at 20 °C:** 1.7

- **Organic solvents:** 0.0 %

- **Water:** 98.7 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
The substance is not subject to classification according to the latest version of the EU lists.

12 Ecological information

- **General notes:**
Generally not hazardous for water
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

- **Product:**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN "Model Regulation":** -

15 Regulatory information

- **Labelling according to EU guidelines:**
Observe the general safety regulations when handling chemicals.
The substance is not subject to classification according to EU lists and other sources of literature known to us.
- **Special labelling of certain preparations:**
Safety data sheet available for professional user on request.

* 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.

- **Relevant R-phrases**
21/22 Harmful in contact with skin and if swallowed.
- **Department issuing MSDS:** Product safety department.
- **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises Dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement internationale concernent le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

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ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

- * **Data compared to the previous version altered.**

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