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

- 1.1 Product identifier
  - Trade name: Buffer solution NA pH 2.00 +/- 0.02, naturel
  - Article number: 79901762
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  - No further relevant information available.
- 1.3 Details of the supplier of the safety data sheet
  - Manufacturer/Supplier:
    - Yokogawa Process Analyzers Europe B.V.
    - Euroweg 2
    - 3825 HD Amersfoort
    - The Netherlands
    - Phone: +31 (0)88-464 1000
    - Fax: +31 (0)88-4641111
    - visit us at: www.yokogawa.com/eu
  - Further information obtainable from:
    - Product safety department
    - Product safety department.
- 1.4 Emergency telephone number: Yokogawa, Phone : +31 (0)88-4641000

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    - GHS05 corrosion
    - Skin Corr. 1A H314 Causes severe skin burns and eye damage.
- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008
  - The product is classified and labelled according to the CLP regulation.
- 2.2.1 Hazard pictograms
  - GHS05
    - Signal word Danger
    - Hazard-determining components of labelling:
      - phosphoric acid
      - 5-Methyl-2-(1-methylethyl)-fenol
    - Hazard statements
      - H314 Causes severe skin burns and eye damage.
    - Precautionary statements
      - P260 Do not breathe dust/fume/gas/mist/vapours/spray.
      - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
      - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
      - P310 Immediately call a POISON CENTER/doctor.
      - P405 Store locked up.
      - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- 2.3 Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.

(Contd. on page 2)
Trade name: Buffer solution NA pH 2.00 +/-0.02, naturel

- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients
- 3.2 Mixtures
  - Description: Mixture of substances listed below with nonhazardous additions.
  - Dangerous components: Void
  - Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures
- 4.1 Description of first aid measures
  - 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.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

SECTION 5: Firefighting measures
- 5.1 Extinguishing media
  - Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
  - Protective equipment: No special measures required.

SECTION 6: Accidental release measures
- 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 6.2 Environmental precautions:
  - Dilute with plenty of water.
  - Do not allow to enter sewers/surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 6.4 Reference to other sections
  No dangerous substances are released.
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage
- 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- 7.2 Conditions for safe storage, including any incompatibilities
  - 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.
- 7.3 Specific end use(s) No further relevant information available.
**SECTION 8: Exposure controls/personal protection**

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

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.</td>
</tr>
</tbody>
</table>

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

- 8.2 Exposure controls
  - Personal protective equipment:
  - General protective and hygienic measures: Wash hands before breaks and at the end of work.
  - 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - Penetration time of glove material: The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection: Goggles recommended during refilling
  - Body protection: Use protective suit.

**SECTION 9: Physical and chemical properties**

- 9.1 Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Fluid
      - Colour: Clear
      - Odour: Characteristic
      - Odour threshold: Not determined.
    - pH-value at 20 °C: 2
    - Change in condition
      - Melting point/Melting range: Undetermined.
      - Boiling point/Boiling range: Undetermined.
    - Flash point: Not applicable.
    - Flammability (solid, gaseous): Not applicable.
    - Ignition temperature:
      - Decomposition temperature: Not determined.
    - Self-igniting: Product is not selfigniting.
    - Danger of explosion: Product does not present an explosion hazard.
    - Explosion limits:
      - Lower: Not determined.
      - Upper: Not determined.
    - Vapour pressure at 20 °C: 23 hPa
    - Density at 20 °C: 1.06 g/cm³
Trade name: Buffer solution NA pH 2.00 +/-0.02, naturel

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials**: No further relevant information available.
- **10.6 Hazardous decomposition products**: No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
  - Acute toxicity
  - Primary irritant effect:
  - Skin corrosion/irritation
    - Causes severe skin burns and eye damage.
  - **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
  - Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
  - CMR effects (carcinogenicity, mutagenicity and toxicity 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.

### SECTION 12: Ecological information

- **12.1 Toxicity**
  - Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - **General notes:**
    - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
    - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

(Contd. on page 5)
Trade name: Buffer solution NA pH 2,00 +/-0,02, naturel

- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

**SECTION 13: Disposal considerations**

- 13.1 Waste treatment methods
- Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Water, if necessary together with cleansing agents.

**SECTION 14: Transport information**

- 14.1 UN-Number
- ADR, ADN, IMDG, IATA: Void
- 14.2 UN proper shipping name
- ADR, ADN, IMDG, IATA: Void
- 14.3 Transport hazard class(es)
- ADR, ADN, IMDG, IATA: Void
- 14.4 Packing group
- ADR, IMDG, IATA: Void
- 14.5 Environmental hazards:
- Marine pollutant: No
- 14.6 Special precautions for user
- Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
- UN "Model Regulation": Not applicable.

**SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
No further relevant information available.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

**SECTION 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.

- Contact: Product safety department
- Abbreviations and acronyms:
  - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  - IATA-DGR: Dangerous Goods Regulations by the “International Air Transport Association” (IATA)
  - ICAO: International Civil Aviation Organisation
  - ICAO-TI: Technical Instructions by the “International Civil Aviation Organisation” (ICAO)
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
- * Data compared to the previous version altered.