1 Identification

• Product identifier

• Trade name: ST 0.0
• Article number: 821971Y
• Description: Phosphate standard solution 0.0 mg/l PO4-P
• Relevant identified uses of the substance or mixture and uses advised against:
  • Product category: PC21 Laboratory chemicals
  • Process category: PROC15 Use as laboratory reagent
• Application of the substance / the preparation: Calibration solution
• Manufacturer/Supplier:
  YSI
  1725 Brannum Lane
  Yellow Springs, OH 45387
  USA
  phone: +1 937-767-7241
• Information department: Email: MSDSinfo@Xyleminc.com
• Emergency telephone number: Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

2 Hazard(s) identification

• Classification of the substance or mixture
  The product is not classified according to the Globally Harmonized System (GHS).

• Label elements:
  • GHS label elements: Void
  • Hazard pictograms: Void
  • Signal word: Void
  • Hazard statements: Void

• Classification system:
  • NFPA ratings (scale 0 - 4)
    Health = 0
    Fire = 0
    Reactivity = 0
  • HMIS-ratings (scale 0 - 4)
    Health = 0
    Fire = 0
    Reactivity = 0

• Other hazards
  • Results of PBT and vPvB assessment
    • PBT: Not applicable.
    • vPvB: Not applicable.

(Contd. on page 2)
3 Composition/information on ingredients

• Chemical characterization:
  • Description:
    Mixture: consisting of the following components.
    Water, hydrochloric acid
  • Dangerous components: Void

4 First-aid measures

• Description of first aid measures
  • After inhalation: Supply fresh air.
  • After skin contact: Rinse skin with water/shower.
  • After eye contact: Rinse opened eye for several minutes under running water.
  • After swallowing:
    Make victim drink water immediately (2 glasses at most).
    Get medical advice/attention if you feel unwell.
  • Information for doctor:
    • Most important symptoms and effects, both acute and delayed No further relevant information available.
    • Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

• Extinguishing media
  • Suitable extinguishing agents: The product is not flammable. Extinguishing agent to suit environment.
  • Special hazards arising from the substance or mixture No further relevant information available.
  • Advice for firefighters
    • Protective equipment: No special measures required.

6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures
  No special measurements required when handled properly.
• Environmental precautions: No special measures required.
• Methods and material for containment and cleaning up: Wash off with water.
• Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

7 Handling and storage

• Handling:
  • Precautions for safe handling No special precautions are necessary if used correctly.
  • Information about protection against explosions and fires: No special measures required.

• Conditions for safe storage, including any incompatibilities
  • 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: Keep receptacle tightly sealed.
  • Specific end use(s) No further relevant information available.
8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

• Control parameters
  • Components with limit values that require monitoring at the workplace:
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  • Additional information: The lists that were valid during the creation were used as basis.

• Exposure controls
  • Personal protective equipment:
  • General protective and hygienic measures: Wash hands before breaks and at the end of work.
  • Breathing equipment: Not required.
  • Protection of hands: Not required.
  • Eye protection: Safety glasses

9 Physical and chemical properties

• Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Color: Colorless</td>
</tr>
<tr>
<td>Odor: Odorless</td>
</tr>
</tbody>
</table>

| pH-value at 20 °C (68 °F): | 2 |

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/Melting range: 0 °C (32 °F)</td>
</tr>
<tr>
<td>Boiling point/Boiling range: 100 °C (212 °F)</td>
</tr>
</tbody>
</table>

| Flash point: | Not applicable. |

| Auto igniting: | Product is not selfigniting. |

| Danger of explosion: | Product does not present an explosion hazard. |

| Vapor pressure at 20 °C (68 °F): | 23 hPa (17 mm Hg) |

| Density at 20 °C (68 °F): | 1 g/cm³ (8.345 lbs/gal) |

| Solubility in / Miscibility with Water: | Fully miscible. |

| Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |

| Other information | No further relevant information available. |

10 Stability and reactivity

• Reactivity
  • Chemical stability
  • Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  • Possibility of hazardous reactions No dangerous reactions known.
  • Conditions to avoid No further relevant information available.
11 Toxicological information

Information on toxicological effects

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:
The product is not subject to classification according to internally approved calculation methods for preparations:

Carcinogenic categories

- IARC (International Agency for Research on Cancer)
  7647-01-0 hydrogen chloride
  3

- NTP (National Toxicology Program)
  None of the ingredients is listed.

- OSHA-Ca (Occupational Safety & Health Administration)
  None of the ingredients is listed.

12 Ecological information

Toxicity
- Aquatic toxicity: No further relevant information available.

Persistence and degradability
- No further relevant information available.

Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.

Additional ecological information:
- General notes: Generally not hazardous for water
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
- Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods
- Recommendation:
  Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.

Uncleaned packagings:
- Recommendation:
  Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Packagings that cannot be cleansed are to be disposed of in the same manner as the product.
- Recommended cleansing agent: Water, if necessary with cleansing agents.
14 Transport information

- **UN-Number**
  - DOT, ADR, ADN, IMDG, IATA: Void

- **UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA: Void

- **Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA: Void

- **Packing group**
  - DOT, ADR, IMDG, IATA: Void

- **Environmental hazards:**
  - Not applicable.

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

- **UN "Model Regulation":**
  - -

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

  - **Section 355 (extremely hazardous substances):**
    - 7647-01-0 hydrogen chloride

  - **Section 313 (Specific toxic chemical listings):**
    - 7647-01-0 hydrogen chloride

  - **TSCA (Toxic Substances Control Act):**
    - All ingredients are listed.

- **Proposition 65**

  - **Chemicals known to cause cancer:**
    - None of the ingredients is listed.

  - **Chemicals known to cause reproductive toxicity for females:**
    - None of the ingredients is listed.

  - **Chemicals known to cause reproductive toxicity for males:**
    - None of the ingredients is listed.

  - **Chemicals known to cause developmental toxicity:**
    - None of the ingredients is listed.

- **Cancerogenity categories**

  - **EPA (Environmental Protection Agency)**
    - None of the ingredients is listed.

  - **TLV (Threshold Limit Value established by ACGIH)**
    - 7647-01-0 hydrogen chloride A4

  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    - None of the ingredients is listed.
Trade name: ST 0.0

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

- Date of preparation / last revision 06/01/2015 / -
- 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
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  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)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
- * Data compared to the previous version altered.