SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Buffer Solution pH 10.00
Catalog Number: YSI 3823
Product Description: Laboratory chemical, for use in calibrating pH probes
Supplier:
YSI, a Xylem brand
Telephone: 937-767-7241
Emergency: CHEMTREC
US/Can: 800-424-9300
International: 001 703-572-3997

Manufacturer:
NCL of Wisconsin, Inc.
Telephone: 1-800-648-7836
Fax: 715-449-2454
Email: nclabs@nclabs.com
PO Box 8, Birnamwood, WI 54414

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification
Reproductive Toxicity: Category 1B

Signal Word: Danger

Hazard Statements
H360: May damage fertility or the unborn child

Precautionary Statements
P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood
P280: Wear protective gloves and eye protection
P308+P313: IF exposed or concerned: Get medical advice/attention
P405: Store locked up
P501: Dispose of contents/container to comply with local, state, and federal regulations

Other Hazards Not Contributing to the Classification: None under normal conditions

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity: Not applicable
Common Name: Not applicable

Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>Approximate %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt;96</td>
</tr>
<tr>
<td>Potassium Hydroxide</td>
<td>1310-58-3</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Disodium EDTA dihydrate</td>
<td>6381-92-6</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Potassium Carbonate</td>
<td>584-08-7</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Potassium Borate</td>
<td>1332-77-0</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Bromphenol Blue, Sodium Salt</td>
<td>62625-28-9</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Bromcresol Green, Sodium Salt</td>
<td>62625-32-5</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General First Aid Measures: Never give anything by mouth to an unconscious person. Seek medical advice if you feel unwell.

If Inhaled: Remove person to fresh air and keep comfortable for breathing. Allow victim to rest.

In Case of Skin Contact: Remove contaminated clothing and wash exposed skin with mild soap and water. Rinse with warm water.

In Case of Eye Contact: Immediately flush eyes with plenty of water. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops.
If Swallowed
Rinse mouth. Do NOT induce vomiting. Get medical attention if you feel unwell.

Most Important Symptoms/Effects Acute and Delayed
May damage fertility or the unborn child

Indication of Immediate Medical Attention and Special Treatment Needed
No additional information available.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Unsuitable Extinguishing Media
Do not use high pressure water stream.

Special Hazards Arising from the Chemical
No additional information available.

Special Protective Actions for Fire-Fighters
Wear self-contained breathing apparatus and protective clothing. Keep exposed containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions
Use personal protective equipment (see section 8). Evacuate area of non-essential personnel. Eliminate ignition sources.

Environmental Precautions
Prevent entry to surface and ground waters.

Methods and Materials for Containment and Cleaning Up
Clean up spills with inert solids. Collect spillage. Store away from other materials. Ensure compliance with federal, state, and local regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling
Avoid contact with eyes and skin. Avoid breathing vapors. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Conditions for Safe Storage Including any Incompatibilities
Keep in a tightly closed container, stored in a cool, dry, ventilated area. Store away from heat sources, strong oxidizers and strong acids

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

<table>
<thead>
<tr>
<th>Potassium Hydroxide (1310-58-3)</th>
<th>USA ACGIH</th>
<th>ACGIH Ceiling (mg/m³)</th>
<th>2 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls
Provide adequate general ventilation. Maintain eye-wash fountain and quick-drench facilities in work area.

Individual Protection Measures
Avoid all unnecessary exposure.

Eye/Face Protection
Use chemical safety goggles and /or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye-wash fountain and quick-drench facilities in work area.

Skin Protection
Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure to prevent skin contact.

Respiratory Protection
Wear appropriate mask.

Other Information
Do not eat, drink, or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State
Liquid

Color
Blue

Odor
Odorless

Odor Threshold
Not determined

pH
10

Melting Point/Freezing Point
Not determined
Initial Boiling Point and Boiling Range: Not determined
Flash Point: Not determined
Evaporation Rate: Not determined
Flammability (Solid, Gas): Not determined
Upper/Lower Flammability/Explosive Limits: Not determined
Vapor Pressure: Not determined
Vapor Density: Not determined
Relative Density: 1.00
Solubility: Soluble in water
Partition Coefficient: n-octanol/water: Not determined
Auto-Ignition Temperature: Not determined
Decomposition Temperature: Not determined
Viscosity: Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No data available
Chemical Stability: Stable under ordinary conditions of use and storage.
Possibility of Hazardous Reactions: No data available
Conditions to Avoid: Extremely high or low temperatures.
Incompatible Materials: Strong oxidizers and strong acids
Hazardous Decomposition Products: When heated to decomposition, can emit toxic gases, carbon dioxide, and carbon monoxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Not classified

<table>
<thead>
<tr>
<th>Potassium Hydroxide (1310-58-3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>333 mg/kg, Rat; experimental value</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>≥90000 mg/kg</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive Toxicity: May damage fertility or the unborn child
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Potential Adverse Human Health Effects and Symptoms: No data available
Other Information: Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: Not applicable
Persistence and Degradability: Not applicable
Bioaccumulative Potential: Not applicable
Mobility in Soil: Not applicable
Other Adverse Effects: Not applicable
SECTION 13: DISPOSAL CONSIDERATIONS

Methods of Disposal

<table>
<thead>
<tr>
<th>Disposal Recommendations</th>
<th>Dispose of contents/containers in accordance with federal, state, and local regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Information</td>
<td>Avoid release to the surrounding environment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Shipping Name</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing Group</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Environmental Hazards</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport in Bulk</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Other Precautions</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

SECTION 15: REGULATORY INFORMATION

| Potassium Hydroxide (1310-58-3) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Disodium EDTA Dihydrate (6381-92-6) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Water (7732-18-5) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Potassium Carbonate (584-08-7) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Potassium Borate (1332-77-0) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Bromphenol Blue, Sodium Salt (62625-28-9) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Bromoresol Green, Sodium Salt (62625-32-5) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |

SECTION 16: OTHER INFORMATION

Revision Date: 12/10/2014

NFPA Hazards

| Health Hazard | 0: Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials. |
| Fire Hazard   | 0: Materials that will not burn. |
| Instability/Reactivity | 0: Normally stable, even under fire exposure conditions, and are not reactive with water. |

HMIS III Rating

| Health | 0: No significant risk to health. |
| Flammability | 0: Materials that will not burn. |
| Physical Hazard | 0: Materials that are normally stable. |
| Personal Protection | A |

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