SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: 10 mg/L NH₄⁺-N Standard (Nitrogen concentration due to ammonium)
Catalog Number: YSI 3842
Product Description: Laboratory chemical
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
Email: nclabs@nclabs.com

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: Not classified
Signal Word: Not applicable
Hazard Statements: Not applicable
Pictograms: None
Precautionary Statements: Not applicable
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;97.5</td>
</tr>
<tr>
<td>Ammonium Chloride</td>
<td>12125-02-9</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Lithium Acetate, Dihydrate</td>
<td>6108-17-4</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Sodium Azide</td>
<td>26628-22-8</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Hydrochloric Acid</td>
<td>7647-01-0</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: Not expected to present a significant hazard under normal use

Indication of Immediate Medical Attention and Special Treatment Needed: No additional information available
SECTION 5: FIRE-FIGHTING MEASURES

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.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

<table>
<thead>
<tr>
<th></th>
<th>Ammonium Chloride (12125-02-9)</th>
<th>Sodium Azide (26628-22-8)</th>
<th>Hydrochloric Acid (7647-01-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH Ceiling (mg/m³)</td>
<td>OSHA PEL STEL (mg/m³)</td>
<td>ACGIH TLV (ppm)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>10 mg/m³</td>
<td>20 mg/m³</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td>OSHA PEL (ppm)</td>
<td>0.11 ppm</td>
</tr>
<tr>
<td>USA ACGIH</td>
<td></td>
<td>ACGIH TLV (ppm)</td>
<td>5 ppm</td>
</tr>
<tr>
<td>USA OSHA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA ACGIH</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

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Initial Boiling Point and Boiling Range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
**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 gaseous ammonia and hydrogen chloride.

### SECTION 11: TOXICOLOGICAL INFORMATION

**Acute Toxicity**  Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 oral rat</th>
<th>LD50 dermal rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ammonium Chloride (12125-02-9)</strong></td>
<td>1650 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Lithium Acetate, Dihydrate (6108-17-4)</strong></td>
<td>5 mg/kg</td>
<td></td>
</tr>
<tr>
<td><strong>Sodium Azide (26628-22-8)</strong></td>
<td>27 mg/kg</td>
<td>20 mg/kg</td>
</tr>
<tr>
<td><strong>Hydrochloric Acid 37% w/w (7647-01-0)</strong></td>
<td>700 mg/kg</td>
<td>5010 mg/kg</td>
</tr>
<tr>
<td><strong>Water (7732-18-5)</strong></td>
<td>≥90000 mg/kg</td>
<td></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**  Not classified
**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
**Routes of Exposure**  Skin and eye contact
**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

Disposal Recommendations: Dispose of contents/containers in accordance with federal, state, and local regulations
Other Information: Avoid release to the surrounding environment

SECTION 14: TRANSPORT INFORMATION

UN Number: Not applicable
UN Shipping Name: Not applicable
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Not applicable
Transport in Bulk: Not applicable
Other Precautions: Not applicable

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>UN Number</th>
<th>Listed on the United States TSCA (Toxic Substances Control Act) inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium Chloride (12125-02-9)</td>
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<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

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

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, NCL of Wisconsin, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for their conditions of use. Accordingly, NCL of Wisconsin, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information.