SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Sulfuric Acid, 0.1 N
NCL Catalog Numbers: S-94
Product Description: Laboratory chemical
Supplier: NCL of Wisconsin, Inc.
    P.O. Box 8
    Birnamwood, WI 54414
    Telephone: 1-800-648-7836  Fax: 715-449-2454
    Emergency Contact: 1-800-424-9300 (Chemetrec)
    Email: nclabs@nclabs.com

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: Not classified
Signal Word: Not applicable
Pictograms: None
Hazard Statements: Not applicable
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

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Water</td>
<td>7732-18-5</td>
<td>&gt;99</td>
</tr>
<tr>
<td></td>
<td>Sulfuric Acid (96%)</td>
<td>7664-93-9</td>
<td>&lt;1</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**  Stop leak if safe to do so. Clean up spills with inert absorbent material. 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 metals, cyanides, strong bases and heat sources.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters**

<table>
<thead>
<tr>
<th></th>
<th>Sulfuric Acid (96%) (7664-93-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH (TWA) (mg/m³)</td>
</tr>
<tr>
<td></td>
<td>0.22 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td></td>
<td>1 mg/m³</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**

**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>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<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>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
### Flammability (Solid, Gas)
Not determined

### Upper/Lower Flammability/Explosive Limits
Not determined

### Vapor Pressure
Not determined

### Vapor Density
Not determined

### Relative Density
1.0

### 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**
Thermal decomposition generates corrosive vapors.

**Chemical Stability**
Stable under ordinary conditions of use and storage.

**Possibility of Hazardous Reactions**
Reacts water, steam, carbonates, cyanides and sulfides.

**Conditions to Avoid**
Extremely high or low temperatures. Heat and sunlight can contribute to instability.

**Incompatible Materials**
Metals, strong bases, metal oxides, hydroxides, amines, and alkaline materials.

**Hazardous Decomposition Products**
When heated to decomposition, can emit toxic gases, sulfur compounds. Thermal decomposition generates corrosive vapors.

### SECTION 11: TOXICOLOGICAL INFORMATION

**Acute Toxicity**
Not classified

<table>
<thead>
<tr>
<th>Sulfuric Acid (96%) (7664-93-9)</th>
<th>Water (7732-18-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LD50 oral rat</strong></td>
<td><strong>LD50 oral rat</strong></td>
</tr>
<tr>
<td>2140 mg/kg</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**
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

**Likely 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
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
3264

UN Shipping Name
Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric Acid)

Packing Group
III

Environmental Hazards
Not applicable

Transport in Bulk
Not applicable

Other Precautions
Not applicable

SECTION 15: REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Sulfuric Acid (96%) (7664-93-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>RQ (Reportable quantity)</td>
</tr>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
<tr>
<td>Water (7732-18-5)</td>
</tr>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

SECTION 16: OTHER INFORMATION

Revision Date: 04/14/2015

NFPA Hazards

| Health Hazard | 1: May cause irritation; minimal residual injury. |
| Fire Hazard | 0: Materials that will not burn. |
| Reactivity/Instability | 0: Normally stable, even under fire exposure conditions, and are not reactive with water. |

HMIS III Rating

| Health | 1: Irritation or minor reversible unjury possible. |
| 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.

END OF SAFETY DATA SHEET