Material Safety Data Sheet
Sulfuric Acid Solutions 0.01N – 0.125N (>1% w/w)

Section 1 - Chemical Product and Company Identification

MSDS Name:
Sulfuric Acid Solutions 0.01N – 0.125N (>1% w/w)
Catalog Numbers:
LC25655, LC25660, LC25670, LC25675, LC25680, LC25685
Synonyms:
None
Company Identification:
LabChem Inc
200 William Pitt Way
Pittsburgh, PA 15238
Company Phone Number:
(412) 826-5230
Emergency Phone Number:
(800) 424-9300
CHEMTREC Phone Number:
(800) 424-9300 or
011-703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>balance</td>
</tr>
<tr>
<td>7664-93-9</td>
<td>Sulfuric acid</td>
<td>&gt;1</td>
</tr>
</tbody>
</table>

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, colorless solution
Warning! May cause irritation to eyes, skin, respiratory, and gastrointestinal tracts.
Target Organs: None.

Potential Health Effects

Eye:
May cause eye irritation.

Skin:
May cause skin irritation.

Ingestion:
May cause gastrointestinal tract irritation with nausea, vomiting and diarrhea.

Inhalation:
May cause irritation of the respiratory tract.
Chronic:
Inhalation of strong inorganic acid mists containing sulfuric acid may cause cancer based on laboratory studies. May cause chronic dermatitis, conjunctivitis, and bronchitis.

Section 4 - First Aid Measures

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until chemical is gone. Get medical aid at once.

Skin:
Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid at once.

Ingestion:
Do NOT induce vomiting. Give conscious victim 2-4 cupfuls of milk or water to dilute acid. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:
Move victim to fresh air immediately. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Get medical aid at once.

Notes to Physician:
Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Contact with metals may evolve flammable hydrogen gas. Avoid breathing toxic and corrosive vapors.

Extinguishing Media:
Use extinguishing media most appropriate for the surrounding fire.

Autoignition Temperature:
No information found.

Flash Point:
No information found.

NFPA Rating:
CAS# 7732-18-5: Health- 0, Flammability- 0, Instability- 0.

Explosion Limits:
Lower: n/a   Upper: n/a

Section 6 - Accidental Release Measures

General Information:
Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Absorb with inert material such as sand, vermiculite, or diatomaceous earth, and transfer to a suitable container labeled for later disposal. May be neutralized to pH 7 with sodium bicarbonate.
Material Safety Data Sheet
Sulfuric Acid Solutions 0.01N – 0.125N (>1% w/w)

Section 7 - Handling and Storage

Handling:
Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use with adequate ventilation.

Storage:
Do not store near alkaline substances. Store in labeled non-reactive containers (glass, plastic) protected from heat and incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:
Facilities using or storing this material should be equipped with an eyewash and safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
<td>None of the components are on this list.</td>
</tr>
<tr>
<td>Sulfuric acid</td>
<td>1 mg/m³ TWA; 3 mg/m³ STEL</td>
<td>1 mg/m³ TWA</td>
<td>1 mg/m³ TWA</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs:
Sulfuric acid: 1 mg/m³ TWA

Personal Protective Equipment

Eyes:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133. Do not wear contact lenses when working with chemicals.

Skin:
Wear appropriate protective gloves to prevent skin exposure.

Clothing:
Wear appropriate protective clothing to prevent skin exposure.

Respirators:
Follow the OSHA respirator regulations found in 29 CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

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>pH</td>
<td>Acidic</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information found.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information found.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt;ether</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information found.</td>
</tr>
</tbody>
</table>
Material Safety Data Sheet
Sulfuric Acid Solutions 0.01N – 0.125N (>1% w/w)

**Boiling Point:** No information found.
**Freezing/Melting Point:** No information found.
**Decomposition Temperature:** No information found.
**Solubility in water:** Soluble.
**Specific Gravity/Density:** 1.0 – 1.1
**Molecular Formula:** No information found.
**Molecular Weight:** No information found.

**Section 10 - Stability and Reactivity**

**Chemical Stability:**
Stable under normal temperatures and pressures.

**Conditions to Avoid:**
Incompatible materials, excess heat.

**Incompatibilities with Other Materials:**
Oxidizers, amines, bases, metals, nitric acid, acetone, alcohols, hydrogen peroxide, halogenated organics

**Hazardous Decomposition Products:**
Oxides of sulfur, hydrogen gas.

**Hazardous Polymerization:**
Has not been reported.

**Section 11 - Toxicological Information**

**RTECS:**
CAS# 7732-18-5: ZC0110000.
CAS# 7664-93-9: WS5600000.

**LD50/LC50:**
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
Inhalation, mouse: LC50 =320 mg/m3/2H
Inhalation, rat: LC50 =510 mg/m3/2H
Oral, rat: LD50 = 2140 mg/kg.

**Carcinogenicity:**
CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.
CAS# 7664-93-9: Listed as a carcinogen by ACGIH, IARC, OSHA, and CA Prop 65 (listed as Strong inorganic acid mists containing sulfuric acid).

**Epidemiology:**
See actual entry in RTECS for complete information.

**Teratogenicity:**
Not available

**Reproductive:**
Not available

**Mutagenicity:**
See actual entry in RTECS for complete information.

**Neurotoxicity:**
Not available
Material Safety Data Sheet
Sulfuric Acid Solutions 0.01N – 0.125N (>1% w/w)

Section 12 - Ecological Information
No information found.

Section 13 - Disposal Considerations
Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated
Hazard Class: Not regulated
UN Number: Not regulated
Packing Group: Not regulated

Section 15 - Regulatory Information

US Federal
TSCA:
CAS# 7732-18-5 is listed on the TSCA Inventory.
CAS# 7664-93-9 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):
CAS# 7664-93-9: final RQ = 1000 pounds (454 kg)

CERCLA/SARA Section 313:
This material contains Sulfuric acid (CAS# 7664-93-9, >1%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:
None of the components are on this list.

US State
State Right to Know:
Sulfuric acid can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California Regulations:
WARNING: This product contains sulfuric acid, listed as strong inorganic mists containing sulfuric acid, a chemical known to the state of California to cause cancer.

European/International Regulations
Canadian DSL/NDSL:
CAS# 7732-18-5 is listed on Canada's DSL List.
CAS# 7664-93-9 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:
CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.
CAS# 7664-93-9 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: November 9, 1997
Revision Date: January 31, 2011

Information in this MSDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc. assumes no liability resulting from the use of this MSDS. The user must determine suitability of this information for his application.