SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form: Mixture
Product name: Sulfuric Acid, 0.01N (0.005M)
Product code: LC25655

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: For laboratory and manufacturing use only.

1.3. Details of the supplier of the safety data sheet
LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number
Emergency number: CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Not classified

2.2. Label elements
GHS-US labelling
No labelling applicable

2.3. Other hazards
Other hazards not contributing to the classification: None.

2.4. Unknown acute toxicity (GHS-US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable
Full text of H-phrases: see section 16

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier (CAS No)</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>99.95</td>
<td>Not classified</td>
</tr>
<tr>
<td>Sulfuric Acid, 96% w/w</td>
<td>7664-93-9</td>
<td>0.05</td>
<td>Skin Corr. 1A, H314 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
**Sulfuric Acid, 0.01N (0.005M)**

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

---

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/injuries:** Not expected to present a significant hazard under anticipated conditions of normal use.

---

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

---

**SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

**Suitable extinguishing media:** Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media:** Do not use a heavy water stream.

---

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

---

#### 5.3. Advice for firefighters

**Firefighting instructions:** Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

**Protection during firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

---

**SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

**Protective equipment:** Safety glasses. Gloves.

**Emergency procedures:** Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

**Protective equipment:** Equip cleanup crew with proper protection.

**Emergency procedures:** Ventilate area.

---

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

---

#### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up:** Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

---

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

---

**SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

**Precautions for safe handling:** 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 vapour.

---

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Keep container closed when not in use.

**Incompatible products:** Metals. Cyanides. Strong bases.

**Incompatible materials:** Heat sources. Sources of ignition. Direct sunlight.

---

#### 7.3. Specific end use(s)

No additional information available

---

**SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

**Sulfuric Acid, 96% w/w (7664-93-9)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (mg/m³)</td>
<td>0.2 mg/m³</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>1 mg/m³</td>
</tr>
</tbody>
</table>

---

#### 8.2. Exposure controls

**Appropriate engineering controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.
Sulfuric Acid, 0.01N (0.005M)

Safety Data Sheet

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| Personal protective equipment | Avoid all unnecessary exposure. |
| Hand protection               | Wear protective gloves.        |
| Eye protection                | Chemical goggles or safety glasses. |
| Respiratory protection        | Wear appropriate mask.         |
| Other information             | Do not eat, drink or smoke during use. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state               | Liquid                          |
| Appearance                   | Clear, colorless liquid.        |
| Colour                       | Colourless.                     |
| Odour                        | None.                           |
| Odour threshold              | No data available               |
| pH                           | No data available               |
| Relative evaporation rate (butylacetate=1) | No data available |
| Melting point                | No data available               |
| Freezing point               | No data available               |
| Boiling point                | No data available               |
| Flash point                  | No data available               |
| Self ignition temperature    | No data available               |
| Decomposition temperature    | No data available               |
| Flammability (solid, gas)    | No data available               |
| Vapour pressure              | No data available               |
| Relative vapour density at 20 °C | No data available |
| Relative density             | No data available               |
| Density                      | 1 g/ml                          |
| Solubility                   | Soluble in water.               |
| Log Pow                      | No data available               |
| Log Kow                      | No data available               |
| Viscosity, kinematic         | 1 cSt                           |
| Viscosity, dynamic           | No data available               |
| Explosive properties         | Not applicable.                 |
| Oxidising properties         | None.                           |
| Explosive limits             | No data available               |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

metals. cyanides. Strong bases.

10.6. Hazardous decomposition products

Sulfur compounds.
### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity**: Not classified

- **Sulfuric Acid, 96% w/w (7664-93-9)**
  - LD50 oral rat: 2140 mg/kg bodyweight (Rat; Experimental value)

- **Water (7732-18-5)**
  - LD50 oral rat: ≥ 90000 mg/kg

**Skin corrosion/irritation**: Not classified

**Serious eye damage/irritation**: Not classified

**Respiratory or skin sensitisation**: Not classified

**Germ cell mutagenicity**: Not classified

**Carcinogenicity**: Not classified

- **Sulfuric Acid, 96% w/w (7664-93-9)**
  - IARC group: 1 - Carcinogenic to humans

**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**: Based on available data, the classification criteria are not met.

**Likely routes of exposure**: Skin and eye contact

### SECTION 12: Ecological information

#### 12.1. Toxicity

- **Sulfuric Acid, 96% w/w (7664-93-9)**
  - LC50 fishes: 42 mg/l (96 h; Gambusia affinis)
  - EC50 Daphnia: 29 mg/l (24 h; Daphnia magna)
  - LC50 fish 2: 49 mg/l (48 h; Lepomis macrochirus)
  - TLM fish: 42 mg/l (96 h; Gambusia affinis)
  - Threshold limit other aquatic organisms: 6900 mg/l (24 h; Pseudomonas fluorescens)

#### 12.2. Persistence and degradability

**Sulfuric Acid, 0.01N (0.005M)**

- Persistence and degradability: Not established.

**Sulfuric Acid, 96% w/w (7664-93-9)**

- Persistence and degradability: Biodegradability: not applicable.

- Biochemical oxygen demand (BOD): Not applicable

- Chemical oxygen demand (COD): Not applicable

- ThOD: Not applicable

- BOD (% of ThOD): Not applicable

**Water (7732-18-5)**

- Persistence and degradability: Not established.

#### 12.3. Bioaccumulative potential

**Sulfuric Acid, 0.01N (0.005M)**

- Bioaccumulative potential: Not established.

**Sulfuric Acid, 96% w/w (7664-93-9)**

- Log Pow: -2.20 (Estimated value)

- Bioaccumulative potential: Bioaccumulation: not applicable.
### Sulfuric Acid, 0.01N (0.005M)

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential</td>
</tr>
</tbody>
</table>

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other information | Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

| Waste disposal recommendations | Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials | Avoid release to the environment. |

### SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

#### Additional information

Other information | No supplementary information available.

#### ADR

 Transport document description | :

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Sulfuric Acid, 96% w/w (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, section 304 of EPA's List of Lists)</td>
</tr>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
</tbody>
</table>

<table>
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</tbody>
</table>

#### 15.2. International regulations

**CANADA**

<table>
<thead>
<tr>
<th>Sulfuric Acid, 0.01N (0.005M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHMIS Classification</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sulfuric Acid, 96% w/w (7664-93-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List) inventory.</td>
</tr>
<tr>
<td>WHMIS Classification</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
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<tbody>
<tr>
<td>Listed on the Canadian DSL (Domestic Substances List) inventory.</td>
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<tr>
<td>WHMIS Classification</td>
</tr>
</tbody>
</table>

**EU-Regulations**

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sulfuric Acid, 0.01N (0.005M)
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Classification according to Directive 67/548/EEC or 1999/45/EC
Not classified

15.2.2. National regulations

<table>
<thead>
<tr>
<th>Sulfuric Acid, 96% w/w (7664-93-9)</th>
<th>Listed on the Canadian Ingredient Disclosure List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water (7732-18-5)</td>
<td>Not listed on the Canadian Ingredient Disclosure List</td>
</tr>
</tbody>
</table>

15.3. US State regulations
No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard
Personal Protection : B

SDS US (GHS HazCom 2012)

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