

### SECTION 1: Identification

#### 1.1. Identification

Product form : Mixtures  
 Product name : Sulfuric Acid, 0.1N (0.05M)  
 Product code : LC25680

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.  
 Recommended use : Laboratory chemicals  
 Restrictions on use : Not for food, drug or household use

#### 1.3. Supplier

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](mailto:info@labchem.com) - [www.labchem.com](http://www.labchem.com)

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or +1-703-741-5970

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

Not classified as a hazardous chemical.

Other hazards not contributing to the classification : None.

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name          | Product identifier  | %     | GHS-US classification                   |
|---------------|---------------------|-------|-----------------------------------------|
| Water         | (CAS-No.) 7732-18-5 | 99.51 | Not classified                          |
| Sulfuric Acid | (CAS-No.) 7664-93-9 | 0.49  | Skin Corr. 1A, H314<br>Eye Dam. 1, H318 |

Full text of hazard classes and H-statements : see section 16

### 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 : Allow victim to breathe fresh air. 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 persists.  
 First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects (acute and delayed)

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

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### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) 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. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective equipment and precautions for fire-fighters

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 vapor.

### 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.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Sulfuric Acid (7664-93-9) |                                      |                                           |
|---------------------------|--------------------------------------|-------------------------------------------|
| ACGIH                     | ACGIH TWA (mg/m <sup>3</sup> )       | 0.2 mg/m <sup>3</sup> (Thoracic fraction) |
| OSHA                      | OSHA PEL (TWA) (mg/m <sup>3</sup> )  | 1 mg/m <sup>3</sup>                       |
| IDLH                      | US IDLH (mg/m <sup>3</sup> )         | 15 mg/m <sup>3</sup>                      |
| NIOSH                     | NIOSH REL (TWA) (mg/m <sup>3</sup> ) | 1 mg/m <sup>3</sup>                       |
| Water (7732-18-5)         |                                      |                                           |
| Not applicable            |                                      |                                           |

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### 8.2. Appropriate engineering 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.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Safety glasses.



#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Respiratory protection:

Respiratory protection not required in normal conditions

#### 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. |
| Color                                       | : Colorless                |
| Odor                                        | : None.                    |
| Odor threshold                              | : No data available        |
| pH                                          | : No data available        |
| Melting point                               | : No data available        |
| Freezing point                              | : No data available        |
| Boiling point                               | : No data available        |
| Flash point                                 | : No data available        |
| Relative evaporation rate (butyl acetate=1) | : No data available        |
| Flammability (solid, gas)                   | : Non flammable.           |
| Vapor pressure                              | : No data available        |
| Relative vapor density at 20 °C             | : No data available        |
| Relative density                            | : No data available        |
| Specific gravity / density                  | : 1 g/ml                   |
| Solubility                                  | : Soluble in water.        |
| Log Pow                                     | : No data available        |
| Auto-ignition temperature                   | : No data available        |
| Decomposition temperature                   | : No data available        |
| Viscosity, kinematic                        | : 1.01 cSt                 |
| Viscosity, dynamic                          | : No data available        |
| Explosion limits                            | : No data available        |
| Explosive properties                        | : Not applicable.          |
| Oxidizing properties                        | : None.                    |

### 9.2. Other information

No additional information available

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### 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

Likely routes of exposure : Skin and eye contact

Acute toxicity : Not classified

| Sulfuric Acid (7664-93-9) |                                                  |
|---------------------------|--------------------------------------------------|
| LD50 oral rat             | 2140 mg/kg body weight (Rat, Experimental value) |
| ATE US (oral)             | 2140 mg/kg body weight                           |

| Water (7732-18-5) |                         |
|-------------------|-------------------------|
| LD50 oral rat     | ≥ 90000 mg/kg           |
| ATE US (oral)     | 90000 mg/kg body weight |

|                                   |                  |
|-----------------------------------|------------------|
| 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 |

| Sulfuric Acid (7664-93-9)                |                                                                                 |
|------------------------------------------|---------------------------------------------------------------------------------|
| Additional information                   | Strong inorganic acid mists containing sulfuric acid are carcinogenic to humans |
| National Toxicology Program (NTP) Status | 2 - Known Human Carcinogens                                                     |

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.

### SECTION 12: Ecological information

#### 12.1. Toxicity

| Sulfuric Acid (7664-93-9) |                                  |
|---------------------------|----------------------------------|
| LC50 fish 1               | 42 mg/l (96 h, Gambusia affinis) |
| EC50 Daphnia 1            | 29 mg/l (24 h, Daphnia magna)    |

#### 12.2. Persistence and degradability

| Sulfuric Acid, 0.1N (0.05M)   |                  |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

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| Sulfuric Acid (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, 0.1N (0.05M) |                        |
|-----------------------------|------------------------|
| Bioaccumulative potential   | Not established.       |
| Sulfuric Acid (7664-93-9)   |                        |
| Log Pow                     | -2.2 (Estimated value) |
| Bioaccumulative potential   | Not bioaccumulative.   |
| Water (7732-18-5)           |                        |
| Bioaccumulative potential   | Not established.       |

### 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. Disposal 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

### Department of Transportation (DOT)

In accordance with DOT  
Not regulated

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

|               |                   |       |
|---------------|-------------------|-------|
| Sulfuric Acid | CAS-No. 7664-93-9 | 0.49% |
|---------------|-------------------|-------|

| Sulfuric Acid (7664-93-9)                                    |                                                                                                      |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| RQ (Reportable quantity, section 304 of EPA's List of Lists) | 1000 lb                                                                                              |
| SARA Section 302 Threshold Planning Quantity (TPQ)           | 1000 lb                                                                                              |
| SARA Section 311/312 Hazard Classes                          | Health hazard - Skin corrosion or Irritation<br>Health hazard - Serious eye damage or eye irritation |

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### 15.2. International regulations

#### CANADA

No additional information available

#### EU-Regulations

No additional information available

#### National regulations

##### Sulfuric Acid (7664-93-9)

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## SECTION 16: Other information

Revision date : 05/08/2018

Other information : None.

Full text of H-phrases: see section 16:

|      |                                         |
|------|-----------------------------------------|
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage               |

NFPA health hazard

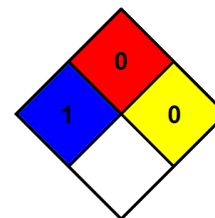
: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

: B

B - Safety glasses, Gloves

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