according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.05.2014

#### Sulfuric Acid, 0.10N,

# SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Sulfuric Acid, 0.10N,

### Manufacturer/Supplier Article number: DUSA1550-P

**Recommended uses of the product and restrictions on use**: Laboratory chemicals

# Manufacturer Details:

AquaPhoenix Scientific 860 Gitts Run Road, Hanover, PA 17331 (717) 632-1291

### Supplier Details:

Dubois Chemicals Inc. 3630 East Kemper Rd, Cincinnati, OH 45241 (800) 438-2647

# **Emergency telephone number**:

Emergency Phone No. (800) 255-3924

## **SECTION 2: Hazards identification**

# Classification of the substance or mixture:

Signal word: None

### Hazard statements:

None

# **Precautionary statements:**

None

#### Other Non-GHS Classification: None

## **SECTION 3: Composition/information on ingredients**

#### Ingredients:

| Ingredients:  |                 |                           |  |  |
|---------------|-----------------|---------------------------|--|--|
| CAS 7664-93-9 | Sulfuric Acid   | 0.5152 %                  |  |  |
| CAS 7732-18-5 | water, Purified | 99.485 %                  |  |  |
|               |                 | Percentages are by weight |  |  |

#### **SECTION 4: First aid measures**

## **Description of first aid measures**

### After inhalation:

Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Provide oxygen if breathing is difficult. Seek immediate medical advice.

according to 29CFR1910/1200 and GHS Rev. 3

#### Initial preparation date: : 12.05.2014

#### Sulfuric Acid, 0.10N,

### After skin contact:

Rinse thoroughly. Rinse/flush exposed area gently using water for at least 30 minutes. Seek immediate medical assistance. Remove contaminated clothing and discard. Neutralize the soaking solution with sodium hydroxide solution.

#### After eye contact:

Protect unexposed eye. Remove contact lens(es) if able to do so during rinsing. Rinse/flush exposed eye(s) gently using water for at least 30 minutes. Seek immediate medical assistance. Rinse under the eyelids during flushing.

### After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Do not induce vomiting. Seek immediate medical assistance.

#### Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath. Burning of eyes or skin. Coughing. Strong inorganic acid mists containing sulfuric acid can cause cancer. Lung damage, chronic bronchitis. Damage to teeth and stomach.

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Use of soap may assist with neutralization on exposed skin in conjunction with flushing.

#### **SECTION 5: Firefighting measures**

### Extinguishing media

## Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use dry Chemical, foam, or carbon dioxide to extinguish fire.

### Unsuitable extinguishing agents:

Do not use water directly on sulfuric acid.

#### Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Poisonous sulfur oxides are combustion products. Aerosols or mist may be produced in a fire. Sulfuric acid may ignite combustibles.

## Advice for firefighters:

### **Protective equipment:**

Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment for fire and chemical resistance.

#### Additional information (precautions):

Containers may explode.

#### **SECTION 6: Accidental release measures**

# Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Neutralize with lime or soda ash. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

#### **Environmental precautions:**

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

# Methods and material for containment and cleaning up:

according to 29CFR1910/1200 and GHS Rev. 3

### Initial preparation date: : 12.05.2014

### Sulfuric Acid, 0.10N,

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Always obey local regulations. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Do not use water. Neutralize with lime or soda ash. Add water to form slurry. Decant water to drain with excess water. Dispose of remaining solid as normal refuse.

# Reference to other sections: None

# **SECTION 7: Handling and storage**

# Precautions for safe handling:

Prevent formation of aerosols. Do not mix with bases. Wash hands after handling. Avoid contact with eyes, skin, and clothing. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wear protective clothing and equipment. Do not handle with incompatibles (see Section 10). Avoid ingestion and inhalation.

## Conditions for safe storage, including any incompatibilities:

Protect from freezing. Keep container tightly closed. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Do not store near incompatible materials (see Section 10). Store away from reducing agents.

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



| Appropriate engineering controls: | Emergency eye wash fountains and safety showers should be available in<br>the immediate vicinity of use/handling. Provide exhaust ventilation or<br>other engineering controls to keep the airborne concentrations of vapor<br>or mists below the applicable workplace exposure limits (Occupational<br>Exposure Limits-OELs) indicated above. Use under a fume hood. Ensure<br>eye wash and safety showers are available. |
|-----------------------------------|--|
| Respiratory protection:           | Use suitable respiratory protective device when high concentrations are<br>present. Use suitable respiratory protective device when aerosol or mist<br>is formed. For spills, respiratory protection may be advisable. Use under a<br>fume hood. Respirator with acid gas cartridges.  |
| Protection of skin:               | The glove material has to be impermeable and resistant to the product/<br>the substance/ the preparation being used/handled. Selection of the glove<br>material on consideration of the penetration times, rates of diffusion and  |

eyes, or hair.

Eye protection: General hygienic measures: Safety glasses with side shields or goggles. Face shield.

Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

the degradation. Wear protective equipment to prevent contact with skin,

#### **SECTION 9: Physical and chemical properties**

| Appearance (physical state, color): |                |                         | Not determined<br>Not determined |
|-------------------------------------|----------------|-------------------------|----------------------------------|
| Odor:                               | Odorless       | Vapor pressure at 20°C: | Not determined                   |
| Odor threshold:                     | Not determined | Vapor density:          | Not determined                   |

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.05.2014

| Sulfuric Acid, 0.10N,             |                |  |  |  |  |
|-----------------------------------|----------------|--|--|--|--|
| pH-value:                         | <2             | Relative density:                            | Approx. 1  |  |  |
| Melting/Freezing point:           | Below 0°C      | Solubilities:                                | Soluble in water.  |  |  |
| Boiling point/Boiling<br>range:   |                | Partition coefficient (n-<br>octanol/water): | Not determined   |  |  |
| Flash point (closed cup):         |                | Auto/Self-ignition<br>temperature:           | Not determined   |  |  |
| Evaporation rate:                 |                | Decomposition<br>temperature:                | Not determined   |  |  |
| Flammability (solid,<br>gaseous): | Not determined | Viscosity:                                   | a. Kinematic: Not determined<br>b. Dynamic: Not determined |  |  |
| Density at 20°C:                  | Not determined |  |  |  |  |

### **SECTION 10: Stability and reactivity**

Reactivity: None Chemical stability: None Possible hazardous reactions: None Conditions to avoid: None Incompatible materials: None Hazardous decomposition products: None

#### **SECTION 11: Toxicological information**

Acute Toxicity: None Chronic Toxicity: No additional information. Skin corrosion/irritation:

Rabbit - Extremely corrosive and destructive to tissue. 7664-93-9.

# Serious eye damage/irritation:

Rabbit - Corrosive to eyes. 7664-93-9.

**Respiratory or skin sensitization**: No additional information. **Carcinogenicity**:

Sulfuric Acid, 7664-93-9: Strong inorganic acid mists containing sulfuric acid may cause cancer.

Germ cell mutagenicity: No additional information. Reproductive Toxicity: No additional information. STOT-single and repeated exposure: No additional information. Additional toxicological information:

No additional information.

## **SECTION 12: Ecological information**

# Ecotoxicity: No additional information.

Persistence and degradability:

Not applicable for test method.

# **Bioaccumulative potential**:

Not expected to bio accumulate.

Mobility in soil:

according to 29CFR1910/1200 and GHS Rev. 3

#### Initial preparation date: : 12.05.2014

Sulfuric Acid, 0.10N,

Aqueous solution has high mobility in soil.

#### Other adverse effects:

Concentrated sulfuric acid has moderate acute and chronic toxicity to aquatic life, which is driven by the pH of the aquatic environment, because of the presence of the acid. Small quantities will be neutralized by natural alkalinity.

#### **SECTION 13: Disposal considerations**

#### Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

#### **SECTION 14: Transport information**

#### **US DOT**

UN Number: ADR, ADN, DOT, IMDG, IATA

Limited Quantity Exception:

**Bulk:** 

RQ (if applicable): None Proper shipping Name: Not Regulated. Hazard Class: None Packing Group: Not Regulated. Marine Pollutant (if applicable): No additional information. Comments: None Not Regulated.

None

Non Bulk: RQ (if applicable): None Proper shipping Name: Not Regulated. Hazard Class: None Packing Group: Not Regulated. Marine Pollutant (if applicable): No additional information. Comments: None

#### **SECTION 15: Regulatory information**

## **United States (USA)**

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

7664-93-9 Sulfuric acid.

# RCRA (hazardous waste code):

None of the ingredients are listed.

#### TSCA (Toxic Substances Control Act) :

All ingredients are listed.

### CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7664-93-9 sulfuric acid 1000 lb.

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.05.2014

### Sulfuric Acid, 0.10N,

### Proposition 65 (California):

# Chemicals known to cause cancer:

7664-93-9 sulfuric acid.

# Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

# Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

# Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

### Canada

# Canadian Domestic Substances List (DSL) :

All ingredients are listed.

# **SECTION 16: Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

### NFPA: 1-0-0 HMIS: 1-0-0 GHS Full Text Phrases: None

# Abbreviations and Acronyms:

- IMDG International Maritime Code for Dangerous Goods.
- PNEC. Predicted No-Effect Concentration (REACH).
- CFR Code of Federal Regulations (USA)
- SARA Superfund Amendments and Reauthorization Act (USA).
- RCRA. Resource Conservation and Recovery Act (USA).
- TSCA. Toxic Substances Control Act (USA).
- NPRI National Pollutant Release Inventory (Canada).
- DOT US Department of Transportation.
- IATA International Air Transport Association.
- GHS Globally Harmonized System of Classification and Labelling of Chemicals.
- ACGIH American Conference of Governmental Industrial Hygienists
- CAS Chemical Abstracts Service (division of the American Chemical Society).
- NFPA National Fire Protection Association (USA).
- HMIS Hazardous Materials Identification System (USA).
- WHMIS Workplace Hazardous Materials Information System (Canada).
- DNEL Derived No-Effect Level (REACH).