

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 12.05.2014**Sulfuric Acid Reagent****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Sulfuric Acid Reagent**Manufacturer/Supplier Article number:** AR-1016-500**Recommended uses of the product and restrictions on use:** Laboratory chemicals**Manufacturer Details:**

Aqua Analytics
 245 Matheson Blvd East, Units 1 & 2 Mississauga, Ontario Canada L4Z 3C9
 (888) 712-4000

Emergency telephone number:

Emergency Phone No. (613) 996-6666

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	<3 %
CAS 7732-18-5	Water	>97 %
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. Maintain an unobstructed airway. Immediately call a POISON CONTROL CENTER or seek medical attention.

After skin contact:

Immediately remove all contaminated clothing. Wash affected area with soap and water. Immediately call a POISON CONTROL CENTER or seek medical attention.

After eye contact:

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Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Immediately call a POISON CONTROL CENTER or seek medical attention.

After swallowing:

Immediately call a POISON CONTROL CENTER or seek medical attention. Do not induce vomiting. Rinse mouth and then drink plenty of water.

Most important symptoms and effects, both acute and delayed: None**Indication of any immediate medical attention and special treatment needed:** None**SECTION 5: Firefighting measures****Extinguishing media****Suitable extinguishing agents:**

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents: None**Special hazards arising from the substance or mixture:**

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:**Protective equipment:**

Wear protective eye wear, gloves and clothing. Refer to Section 8. Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

Additional information (precautions):

Heating causes a rise in pressure, risk of bursting and combustion. Shut off sources of ignition. Carbon monoxide and carbon dioxide may form upon combustion.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation. Ensure air handling systems are operational. Wear protective eye wear, gloves and clothing.

Environmental precautions:

Should not be released into the environment. Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders). Dispose of contents / container in accordance with local regulations.

Reference to other sections: None**SECTION 7: Handling and storage****Precautions for safe handling:**

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor. Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area. Store away from foodstuffs.

SECTION 8: Exposure controls/personal protection

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Control parameters:	7664-93-9, Sulfuric Acid, OSHA PEL TWA 1.0 mg/m ³ . 7664-93-9, Sulfuric Acid, ACGIH TLV: 0.2 mg/m ³ , thoracic fraction. 7664-93-9, Sulfuric Acid, NIOSH REL TWA 1.0 mg/m ³ .
Appropriate engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
Respiratory protection:	When necessary, use NIOSH-approved breathing equipment.
Protection of skin:	Select glove material impermeable and resistant to the substance.
Eye protection:	Safety goggles or glasses, or appropriate eye protection.
General hygienic measures:	Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing. Perform routine housekeeping. Wash contaminated clothing before reusing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear, colorless liquid	Explosion limit lower:	Not determined
		Explosion limit upper:	Not determined
Odor:	Odorless	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	<2	Relative density:	Approx. 1
Melting/Freezing point:	Approx. 0°C	Solubilities:	Infinite solubility in water.
Boiling point/Boiling range:	Approx. 100°C	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Not determined		

SECTION 10: Stability and reactivity**Reactivity:**

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possible hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

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Corrosive to the skin. Sulfuric Acid.

Serious eye damage/irritation: No additional information.**Respiratory or skin sensitization:** No additional information.**Carcinogenicity:****Sulfuric Acid :** 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:

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:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11).

SECTION 14: Transport information**US DOT****UN Number:**

ADR, ADN, DOT, IMDG, IATA

Not Regulated

Limited Quantity Exception:

None

Bulk:**RQ (if applicable):** None**Non Bulk:****RQ (if applicable):** None

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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) :

7664-93-9 Sulfuric Acid: listed.

7732-18-5 Water: listed.

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

7664-93-9 Sulfuric Acid 1000.

Proposition 65 (California):**Chemicals known to cause cancer:**

7664-93-9 Strong inorganic acid mists containing 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) :**

7664-93-9 Sulfuric Acid: listed.

7732-18-5 Water: 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

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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).