

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.01.2017**Boiler Water Reagent****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Boiler Water Reagent**Manufacturer/Supplier Article number:** AR-1032-60**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:****Corrosive**

Skin corrosion, category 1A
 Serious eye damage, category 1

Signal word: Danger**Hazard statements:**

Causes severe skin burns and eye damage.
 Causes serious eye damage.

Precautionary statements:

Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash skin thoroughly after handling.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Specific treatment (see supplemental first aid instructions on this label).
 Wash contaminated clothing before reuse.
 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
 Store locked up.
 Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification: None**SECTION 3: Composition/information on ingredients****Ingredients:**

CAS / EINECS #	Ingredient Name	Wt. %
7732-18-5	Water	<100

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.01.2017

Boiler Water Reagent		
16774-21-3	Ceric Ammonium Nitrate	<20
7664-93-9	Sulfuric Acid	<100

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:

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. May form corrosive mixtures with water.

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

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.01.2017**Boiler Water Reagent**

binders). Dispose of contents / container in accordance with local regulations. Wear protective eye wear, gloves and clothing.

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. Keep container tightly sealed. Protect from freezing and physical damage.

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

7664-93-9, Sulfuric Acid, OSHA PEL TWA 1.0 mg/m³.
 7664-93-9, Sulfuric Acid, ACGIH TLV: 0.2 mg/m³, thoracic fraction.
 7664-93-9, Sulfuric Acid, NIOSH REL TWA 1.0 mg/m³.
 7664-93-9, Sulfuric Acid, ACGIH TLV STEL: 3.0 mg/m³.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and 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, orange colored liquid	Explosion limit lower: Explosion limit upper:	Not available Not available
Odor:	Odorless	Vapor pressure at 20°C:	Not available
Odor threshold:	Not available	Vapor density:	>1
pH-value:	<3	Relative density:	Approx. 1.05
Melting/Freezing point:	Approx. 0°C	Solubilities:	Infinite solubility in water.
Boiling point/Boiling range:	Approx. 100°C	Partition coefficient (n-octanol/water):	Not available
Flash point (closed cup):	Not available	Auto/Self-ignition temperature:	Not available
Evaporation rate:	Not available	Decomposition temperature:	Not available
Flammability (solid, gaseous):	Not available	Viscosity:	a. Kinematic: Not available b. Dynamic: Not available

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.01.2017

Boiler Water Reagent	
Density at 20°C:	Not available

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:

Incompatible materials, excess heat.

Incompatible materials:

Organics, chlorates, carbides, fulminates, picrates, alkalines, reducing agents, nitrates, acetic acids, oxidizing agents, metals.

Hazardous decomposition products:

Oxides of sulfur.

SECTION 11: Toxicological information

Acute Toxicity: None

Chronic Toxicity: No additional information.

Skin corrosion/irritation:

Causes severe skin burns and eye damage.

Causes severe skin burns and eye damage.

Serious eye damage/irritation:

Causes serious eye damage.

Respiratory or skin sensitization: No additional information.

Carcinogenicity:

Strong Inorganic Acid Mists Containing Sulfuric Acid: Known to be human carcinogens.

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: No additional information.

Bioaccumulative potential: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

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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 1760

Limited Quantity Exception: None**Bulk:****RQ (if applicable):** None**Proper shipping Name:** Corrosive Liquid, N.O.S. (Sulfuric Acid, Ceric Ammonium Nitrate).**Hazard Class:** 8**Packing Group:** II.**Marine Pollutant (if applicable):** No**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** Corrosive Liquid, N.O.S. (Sulfuric Acid, Ceric Ammonium Nitrate).**Hazard Class:** 8**Packing Group:** II.**Marine Pollutant (if applicable):** No**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

Acute

SARA Section 313 (Specific toxic chemical listings):**RCRA (hazardous waste code):**

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):****Proposition 65 (California):****Chemicals known to cause cancer:****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.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 02.01.2017**Boiler Water Reagent****Canada****Canadian Domestic Substances List (DSL) :****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. 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: 3-0-0**HMIS:** 3-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:** None