Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 01.13.2015

Electrode Cleaner

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

Product name: Electrode Cleaner

Manufacturer/Supplier Article number: AS-4008-500

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:

Irritant
Skin irritation, category 2
Eye irritation, category 2A

Corrosive
Corrosive to metals, category 1

Skin Irrit. 2.
Corr. Metals 1.
Eye Damage 2.

Signal word: Warning

Hazard statements:

May be corrosive to metals.
Harmful if swallowed.
Causes serious eye irritation.
Causes severe skin burns and eye damage.
May cause respiratory irritation.
Toxic to aquatic life with long lasting effects.

Precautionary statements:

If medical advice is needed have product container or label at hand.
Keep out of reach of children.
Read label before use.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
Keep only in original container.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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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.
Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth.
Collect spillage.
If eye irritation persists get medical advice/attention.
Store in a well ventilated place. Keep container tightly closed.
Store locked up.
Store in a corrosive resistant container with a resistant inner liner.
Dispose of contents/container.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:		
CAS 9002-93-1	Triton X-100	<0.5 %
CAS 7647-01-0	Hydrochloric Acid, ACS	<2 %
CAS 7732-18-5	Deionized 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. Give artificial respiration if necessary. If breathing is difficult give oxygen.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

After eye contact:

Protect unexposed eye. Rinse or flush exposed eye gently using water for 15-20 minutes. Remove contact lenses, if present and easy to do, and continue rinsing. Immediately get medical assistance.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Never give anything by mouth to an unconscious person. Dilute mouth with water or milk after rinsing. Seek medical attention immediately.

Most important symptoms and effects, both acute and delayed:

Irritation. Headache. Nausea. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

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SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Neutralize with soda ash or slaked lime.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

May react with metals to release hydrogen gas.

Advice for firefighters:

Protective equipment:

Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that dust-handling systems (exhaust ducts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area. Use personal protective equipment. Avoid contact with eyes, skin, and clothing.

Environmental precautions:

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

Methods and material for containment and cleaning up:

Wear protective eyeware, gloves, and clothing. Follow advice and precautions. If necessary use trained response staff or contractor. Cover with sodium carbonate or soda ash. Add water to make slurry. Decant to drain. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always obey local regulations. Follow proper disposal methods. Refer to Section 8. Refer to Section 13. Refer to Section 5.

Reference to other sections: None

SECTION 7: Handling and storage

Precautions for safe handling:

Wash hands after handling. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Refer to Section 5. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Follow advice and precautions.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Store with like hazards. Refer to Section 5. Protect from freezing and physical damage. Keep away from open flames, hot surfaces, and sources of ignition. Keep away from food and beverages. Keep container tightly sealed. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection

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Control parameters:	7647-01-0, Hydrochloric Acid , 2 ppm USA. ACGIH Threshold Limit Values (TLV). 7647-01-0, Hydrochloric Acid, 5 ppm 7 mg/m³ USA. NIOSH Recommended Exposure Limits.
Appropriate engineering controls:	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. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Respiratory protection:	Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.
Protection of skin:	Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
Eye protection:	Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.
General hygienic measures:	Avoid contact with skin, eyes and clothing. Before re-wearing, wash contaminated clothing. Wash hands before breaks and at the end of work. Perform routine housekeeping to prevent dust generation.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	Clear colorless liquid	**Explosion limit lower**: **Explosion limit upper**:	Not determined Not determined
Odor:	Odorless	**Vapor pressure at 20°C**:	Not determined
Odor threshold:	Not determined	**Vapor density**:	Not determined
pH-value:	< 1	**Relative density**:	Not determined
Melting/Freezing point:	Approx. 0°C	**Solubilities**:	Infinite solubility.
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:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions: None

Conditions to avoid:

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Incompatible materials.

Incompatible materials:

Most metals, alkalis, active metals, cyanides, sulfides, sulfites, metal oxides, and formaldehydes.

Hazardous decomposition products:

Fumes of hydrogen chloride and hydrogen in contact with metals. Chloride gas from oxidizers.

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 Dermal - rabbit - 8,000 mg/kg 9002-93-1.

Chronic Toxicity: No additional information.
Skin corrosion/irritation: No additional information.
Serious eye damage/irritation: No additional information.
Respiratory or skin sensitization: No additional information.
Carcinogenicity: No additional information.

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:

Toxicity to aquatic life: , Hydrogen chloride has slight acute and chronic toxicity to aquatic life.
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 8.9 mg/l - 96.0 h, 9002-93-1.
Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia - 26 mg/l - 48 h, 9002-93-1.
Toxicity to fish LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h, 7647-01-0.

Persistence and degradability: No additional information.
Bioaccumulative potential: No additional information.
Mobility in soil:

Aqueous solution has high mobility in soil.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Cover spill with soda ash or calcium carbonate. Mix and add water to form slurry. Decant to drain. Treat the solid residue as normal refuse. Dispose of empty containers as unused product. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

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US DOT

UN Number:
ADR, ADN, DOT, IMDG, IATA — Not Regulated

Limited Quantity Exception: — None

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

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

None of the ingredients are listed.

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):

7647-01-0 Hydrochloric Acid 1000 lbs.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

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

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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. 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. 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.

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.
IMDG	International Maritime Code for Dangerous Goods.
PNEC.	Predicted No-Effect Concentration (REACH).
CFR	Code of Federal Regulations (USA)
IATA	International Air Transport Association.
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).
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
HMIS	Hazardous Materials Identification System (USA).
WHMIS	Workplace Hazardous Materials Information System (Canada).
DNEL	Derived No-Effect Level (REACH).

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