

AQUATIZE® - Material Safety Data Sheet

Section 1 – Chemical Product and Company Information

Product name: AQUATIZE®
Product use: Water Disinfectant
Product classification: None (not regulated)
Manufacturer: Clean Water International LLC
651 Sussex St., Unit B
Kinston, NC 28504
(919)396-4001
MSDS origination date: October 17, 2007
MSDS revision date: April 17, 2008
MSDS prepared by: Clean Water International LLC, Quality Assurance Department
(919)396-4001

Section 2 – Composition/Information on Hazardous Ingredients

	<u>% w/w</u>	<u>CAS #</u>	<u>LD₅₀</u>	<u>LC₅₀</u>
Sodium Chlorite	3.7	7758-19-2	165 mg/kg	No available data
Sodium Chlorate	1.4	7775-09-9	1200 mg/kg	No available data

Section 3 – Hazards Identification

Routes of entry: Eye and skin contact, skin absorption, inhalation, ingestion
Potential health effects: Severely irritating to eyes
No more than slightly irritating to skin
No more than slightly toxic if absorbed through skin
No more than slightly toxic if inhaled
Moderately toxic if ingested

Section 4 – First Aid Measures

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Consult a physician if burning or irritation persists.
Skin Contact: May result in irritation. In case of contact, rinse exposed area with water. Consult a physician if burning or irritation persists.
Inhalation: If person experiences nausea, headache, or dizziness, person should stop work immediately and move to fresh air until these symptoms disappear. If breathing is difficult, administer oxygen, keep the person warm and at rest, and call a physician.
Ingestion: Immediately drink large quantities of water. Do not induce vomiting. Consult a physician immediately.

Section 5 – Fire Fighting Measures

Flammability: Not flammable or combustible
Flashpoint: NA
Flammable Limits: NA
Autoignition Temperature: NA
Explosion Data: NA
Means of Extinction: NA. Choose extinguishing media suitable for surrounding materials.
Hazardous Combustion Products: Chlorine and oxides of sodium can form from dried residue

Section 6 – Leak and Spill Procedures

Leaks and Spills: Small spills can be flushed with large amounts of water. For larger spills, ventilate the area. Dike and contain the spill. Spilled material may be absorbed using clay, soil or non-flammable commercial absorbents. Place the absorbed material into drums approved for waste disposal. Flush the spill area with water.

Section 7 – Handling and Storage

Handling Procedures:	Do not taste or swallow. Do not get in eyes, on skin or on clothing. Keep container closed. Use adequate ventilation. Follow protective controls set forth in Section 8 when handling this product. Wash thoroughly after handling.
Storage Requirements:	Avoid excessive heat. Store out of direct sunlight in closed containers. Avoid contact with acids, reducing agents, oxidizers (including bleach), organic solvents and compounds, organic matter, steel, copper and copper alloys, and sulfur-containing rubber.

Section 8 – Exposure Control/Personal Protection

Exposure Limits:	No occupational exposure limits established
Engineering Controls:	Local exhaust ventilation is recommended if vapors, mists or aerosols are generated. Otherwise, use general exhaust ventilation.
Personal Protection:	
Eye:	Where this is potential for eye contact, wear chemical safety goggles with a face shield.
Clothing:	Wear chemical resistant clothing (such as an apron) when splashing may occur. Thoroughly wash all contaminated clothing.
Gloves:	Wear neoprene or butyl gloves.
Footwear:	Wear neoprene boots.
Respirator:	Wear a NIOSH/MSHA approved acid gas respirator plus a mist prefilter if overexposure to vapors, mists or aerosols is possible.
Other:	Emergency eyewash and safety showers must be provided in the immediate work area.

Section 9 – Physical and Chemical Properties

Physical State:	Liquid
Appearance and Odor:	Water white liquid with a very slight chlorine odor
Odor Threshold:	Not available
Specific Gravity:	1.05 @ 60/60°F
Vapor Density:	Not available
Vapor Pressure:	Not available
Evaporation Rate:	Not available
Boiling Point:	Not available
Freezing Point:	Not available
pH:	10-12 @ 25°C
Coefficient of Water/Oil Distribution:	Not available
Solubility in Water:	Complete

Section 10 – Stability and Reactivity

Chemical Stability:	Stable under normal and anticipated storage and handling conditions. Avoid flames, potential ignition sources, or other high temperature sources that induce thermal decomposition. Avoid evaporation to dryness. Dried material can ignite upon contact with combustibles. Avoid contamination with foreign materials. Avoid exposure to sunlight or ultraviolet light.
Incompatibility:	Incompatible with acids, reducing agents, oxidizing agents (including bleach), organic solvents and compounds, organic matter, steel, copper and copper alloys, and sulfur-containing rubber
Reactivity:	Stable at normal temperatures and pressure.
Hazardous Decomposition Products:	Contact with acids, chlorine, and bleach can generate chlorine dioxide gas. Temperatures above 150°C can liberate chlorine dioxide, oxides of sodium, and chlorine gas.

Section 11 – Toxicological Information

Effects of Acute Exposure:

Inhalation:	Inhalation of mists may cause irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes.
Skin:	Direct contact with skin may cause irritation.
Eyes:	Direct contact with eyes may cause severe irritation, pain, and burns, and possibly permanent damage.
Ingestion:	Ingestion may cause immediate pain and burns of the mucous membranes. There may be discoloration of the tissues. Swallowing and speech may be difficult. The effects on the esophagus and gastrointestinal tract may range from irritation to corrosion.

Effects of Chronic Exposure:

Inhalation:	Depending on the concentration and duration of exposure, repeated or prolonged exposure may cause respiratory tract damage.
Skin:	Depending on the concentration and duration of exposure, repeated or prolonged exposure may result in dermatitis.
Eyes:	Depending on the concentration and duration of exposure, repeated or prolonged exposure may cause effects similar to acute exposure.
Ingestion:	Repeated ingestion of small doses may cause anorexia, weight loss and kidney damage.
Irritancy:	Severe irritant to eyes, slight irritant to skin
Skin Sensitization:	No information available
Respiratory Sensitization:	No information available
Carcinogenicity:	IARC: No evidence found for sodium chlorite or sodium chlorate ACGIH: No information available
Reproductive Toxicity:	No evidence found for sodium chlorite or sodium chlorate
Teratogenicity:	No evidence found for sodium chlorite or sodium chlorate
Embryotoxicity:	No evidence found for sodium chlorite or sodium chlorate
Mutagenicity:	No evidence found for sodium chlorite or sodium chlorate
Synergistic Products/Effects:	No information available

Section 12 – Ecological Information

Aquatic Toxicity:	This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority.
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Section 13 – Disposal Considerations

Waste Disposal:	Disposal of this material must be done in accordance with local, state and federal regulations. Waste characterization and compliance with disposal regulations are the responsibilities of the waste generator.
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Section 14 – Transport Information

Special Shipping Information:	None (not regulated)
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Section 15 – Regulatory Information

WHMIS Classification: None

OSHA Process Safety: None

SARA:

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355.30): Not regulated

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

Acute: Yes

Chronic: Yes

Fire: No

Reactive: No

Sudden Release: No

SARA Title III Section 313 (40 CFR 372.65): Not regulated

TSCA: Not listed on TSCA inventory

EPA: This product is a registered pesticide (40 CFR 152), EPA Reg. No. 064449-1

Section 16 – Other Information

NFPA Ratings:

Health: 1

Flammability: 0

Reactivity: 1

All information appearing herein is based upon data obtained by Clean Water International (CWI) and/or recognized technical sources. While the information is believed to be accurate, CWI makes no representations as to its accuracy or sufficiency. Conditions of use are beyond CWI's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.