SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: BROMMAX 7.1

Product Use: Water Treatment Antimicrobial Solution

Chemical Family: Stabilized Liquid Bromine

Company Name:

State Industrial Products
5915 Landerbrook Drive
Mayfield Heights, OH 44124
To Order Call: 1-866-747-2229

6935 Davand Drive
Mississauga, Ontario L5T 1L5
To Order Call: 1-800-668-6513

Emergency Contact:

CHEMTREC: 24 Hr. Emergency Tel.#: 1-800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), These requirements differ from the classification criteria and hazard information required for safety data sheets of non-pesticide chemicals. Please see Section 15 for FIFRA labeling information.

Classification of the Substance or Mixture:

Skin Corrosion - Category 1
Serious Eye Damage - Category 1
Corrosive to Metals - Category 1
Acute Toxicity - Inhalation Category 4
Acute Toxicity - Dermal Category 5

Signal Word: DANGER

Hazard Statements:

Causes severe skin burns and eye damage
May be corrosive to metals
Harmful if inhaled
May be harmful in contact with skin

Precautionary Statements:

Prevention

Wash hands thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection.
Keep only in original container.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.

Response

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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
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
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

Storage

Store locked up.
Store in a corrosive resistant container with a resistant inner liner.

Disposal

Dispose of contents/container in accordance with local regulations.

Hazards not Otherwise Classified:

No other hazards classified.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Synonym	CAS Number	Concentration
SULFAMICACID, N-BROMO, SODIUM SALT	N-BROMOSULFAMATE	1004542-84-0	15-25%
SODIUM HYDROXIDE	CAUSTIC SODA	1310-73-2	1-5%

SECTION 4 - FIRST-AID MEASURES

Inhalation: Get medical advice/attention if you feel unwell or are concerned.

Skin Contact: Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water with a flushing duration of 15-20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before re-use or discard.

Eye Contact: Remove source of exposure or *move* person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 30 minutes. Take care not to rinse contaminated water into the unaffected eye or into the face. Immediately call a POISON CENTER/doctor.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Most Important Symptoms and Effects, both Acute and Delayed: Causes irritation/burns that may result in permanent impairment of vision, *even* blindness. Contact with skin can cause irritation. May be harmful if swallowed.

Indication of any Immediate Medical Attention and Special Treatment Needed: Treat symptomatically

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media: Use water spray, powder, foam, carbon dioxide.

Special hazards arising from the substance or mixture: Non combustible. May give off irritating or toxic fumes (or gases) in a fire.

Flammability classification (OSHA 29 CFR 1910.106) (Hazcom 2012): Non flammable

Hazardous Combustion Products: May cause fire and explosions when in contact with incompatible materials.

Special protective equipment and precautions for firefighters: In the *event* of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

Methods and materials for containment and cleaning up: SMALL SPILLS (less than 1 gallon): Dike small spills with inert material (sand, earth, etc.). Collect in plastic containers only. Wash area and let dry. LARGE SPILL: Should be diked with sand ahead of spill. Collect in plastic containers only. Ensure adequate decontamination of tools and equipment following clean up.

Special spill response procedures: Collect spills in plastic containers only. Prevent from entering sewers, waterways, or low areas.

SECTION 7 - HANDLING AND STORAGE

Precautions for Safe Handling: Wear at least chemical resistant gloves and eye protection, face shield, and chemical resistant garments when handling, moving or using this product. Do not contaminate water, food, or feed by storage or disposal.

Conditions for Safe Storage: Store in a cool, dry, well ventilated place away from direct sunlight. Keep container closed when not in use.

Incompatible Materials: Strong reducing agents such as sulfite and metabisulfite, strong acids and bases. Never mix this product with undiluted sodium hypochlorite bleach. The mixture will result in a violent exothermic reaction that produces a great deal of heat and nitrogen gas bubbles.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Identity	CAS Number	Type	Exposure Limit Values	Source
SODIUM HYDROXIDE	1310-73-2	TLV	2 mg/m3 (ceiling)	ACGIH
		PEL	2 mg/m3 (ceiling)	NIOSH
		REL	2 mg/m3 (ceiling)	OSHA

Ventilation and engineering measures: Forced air, local exhaust, or open air is adequate.

Respiratory Protection: Not a respiratory irritant unless dealing with a mist form, then wear appropriate NIOSH respirator.

Skin Protection: Wear chemical resistant gloves and chemical resistant garments when handling, wash garments before re-use.

Eye/Face Protection: Wear chemical goggles; also wear a face shield if splashing hazard exists.

Other Protective Equipment: Eye wash facility and emergency shower should be in close proximity.

General Hygiene Conditions: Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industry hygiene and safety practice.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow to light orange liquid

Odor: Mild chlorine like odor

pH: 12.0-13.0 (1:100)

Melting/Freezing point: < -7°C / <20°F

Initial boiling point and boiling range: No information available

Flash Point: Not applicable

Flammability (solid, gas): Non flammable

Specific gravity: 1.3 - 1.35 g/ml

Solubility in water: Complete

Decomposition temperature: No information available.

Viscosity: 15-25 est at 20°c / 68°F

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Reactive with oxidizing agents, reducing agents, organic materials, metals, acids and alkalis.

Chemical Stability: Stable for up to 1 year when stored under normal conditions.

Possibility of Hazardous Reactions: May react with incompatible materials

Conditions to Avoid: Avoid contact with strong acids and oxidizers. Incompatible materials and cold temperatures.

Incompatible Materials: Strong reducing agents such as sulfite and metabisulfite, and strong acids. Never mix this product with undiluted sodium hypochlorite bleach. The mixture will result in a violent exothermic reaction that produces a great deal of heat and nitrogen gas bubbles.

Hazardous Decomposition Products: Nitrogen oxides, bromine and hydrobromic acid vapors.

SECTION 11 -TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry - inhalation: YES

Routes of entry - skin & eye: YES

Routes of entry - ingestion: YES

Routes of entry - skin absorption: NO

Potential Health Effects:

Signs and symptoms of short term (acute) exposure:

Inhalation: May cause irritation to respiratory system in mist/vapor form.

Ingestion: Corrosive! Swallowing causes severe burns of mouth, throat, and stomach. Severe scarring of tissue, corrosion, permanent tissue destruction and death may result. Symptoms may include severe pain, nausea, vomiting, diarrhea, shock, hemorrhaging and/or fall in blood pressure. Damage may appear days after exposure.

Skin: Corrosive! Contact with skin causes irritation or severe burns and scarring with greater exposures.

Eye: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Potential Chronic Health Effects:

Mutagenicity: May have mutagenic and tumorigenic effects with long term exposure.

Carcinogenicity: No ingredients are listed as carcinogens by ACGIH, IARC, OSHA, or NTP.

Reproductive effects: May cause reproductive effects.

Sensitization to material: Not a known sensitizer in humans or animals.

Specific target organ effects: No information available

Medical conditions aggravated by overexposure: No information available

Toxicological data: The calculated ATE values for this mixture are:

ATE oral=> 5000 mg/kg

ATE dermal= > 2000 mg/kg

ATE inhalation (mist)= 2.85 mg/L

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity: May be harmful to aquatic life.

Persistence and degradability: No information available.

Bioaccumulation potential: No information available.

Mobility in soil: No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for disposal: Do not contaminate water, food, or feed by storage and/or disposal. When handling refer to protective measures listed in sections 7 and 8. Empty residue from containers, rinse container well.

Method of disposal: Dispose of in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

RCRA: If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of: Corrosivity D002

SECTION 14 -TRANSPORTATION INFORMATION

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

Please note the GHS and DOT Standards are NOT identical and therefore can have varying classifications

US 49 CFR/DOT/IATA/IMDG Information:

UN No.: 1760

UN Proper Shipping Name: Corrosive Liquid, n.o.s. (bromide salts)

Transportation hazard class(es): 8

Packing Group: III

Environmental hazards: Not a Marine Pollutant

SECTION 15 - REGULATORY INFORMATION

FIFRA Classification/Typical Hazard Labeling, as outlined in EPA Label Review Manual

Hazard Data

Signal Word	DANGER
Acute Toxicity, oral	Not Classified (NC)
Acute Toxicity, dermal	Not Classified (NC)
Acute Toxicity, inhalation	Not classified (NC)
Skin irritation/corrosion	Category I: Corrosive. Causes skin burns
Serious eye damage	Category I: Corrosive, Causes irreversible eye damage
Sensitization	Not Classified (NC)
Environmental (aquatic) toxicity	This pesticide is toxic to fish and other aquatic organisms.

US Federal Information:

TSCA information: All components are listed on the TSCA inventory.

US CERCLA reportable quantity (RQ): Non Regulated Material.

SARA Title III: Acute Health Hazard

California Prop 65: This product does not contain any products known to the state of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 - OTHER INFORMATION

NFPA	**Health Hazards 3**	**Flammability**	**Stability 1**	**Special Hazards OX, COR**
HMIS	**Health Hazards 3**	**Flammability**	**Physical Hazard**	**Personal Protection C**

Uniform Fire Code (NFPA 400): Organic Peroxide: Class IV, Liquid

NFPA/HMIS Ratings Legend

Severe= 4; Serious= 3; Moderate= 2; Slight= **1;** Minimal = 0
Special hazards: OX = Oxidizer; COR = Corrosive
Personal Protection = C (safety glasses, gloves, protective apron)

Legend:

SARA: The Superfund Amendments and Reauthorization Act

RCRA: Resource Conservation and Recovery Act

TSCA: Toxic Substances Control Act

CFR: Code of Federal Regulations

DOT: Department of Transportation

ATE: Acute Toxicity Estimate

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