

# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

**Product Identifier:** BROMMAX 7.1

**Product Code:** 28

**Product Use:** Water Treatment Antimicrobial Solution

**Chemical Family:** Stabilized Liquid Bromine

**Registration Number:** 63838-5

**Enviro Tech Chemical Services, Inc.**

500 Winmoore Way Modesto, CA 95358

(209) 581-9576 (7 AM to 5 PM, PST, Monday to Friday)

**24 Hr. Emergency Tel.#:** 1-800-255-3924

## 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.

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## Hazards not Otherwise Classified:

No other hazards classified.

## SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	Synonym	CAS Number	Concentration
SULFAMIC ACID, 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

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**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:** < -20°C / <-4°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 cSt 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

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**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

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<b>NFPA</b>	<b>Health Hazards 3</b>	<b>Flammability 1</b>	<b>Stability 1</b>	<b>Special Hazards OX, COR</b>
<b>HMIS</b>	<b>Health Hazards 3</b>	<b>Flammability 1</b>	<b>Physical Hazard 1</b>	<b>Personal Protection C</b>

**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

Revision No: 4

Preparation date: 4/20/2021