

## Material Safety Data Sheet

### SeaKlear Spa: Sodium Bromide

#### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Manufacturer's Name:** HaloSource, Inc.  
**Corporate Address:** 1631 220<sup>th</sup> St. SE, Suite 100, Bothell, WA 98021  
**Manufacturer's Telephone:** (425) 881-6464 (Monday-Friday, 8AM-5PM PDT)  
**Emergency Telephone:** 800-424-9300 Chemtrec (24 Hours)  
**Material/Trade/Product Name:** SeaKlear Spa: Sodium Bromide  
**Synonyms:** None  
**Chemical Name:** Not available  
**Chemical Formula:** Not available  
**CAS No.:** Not applicable  
**EPA Re. No.:** None  
**Product Use:** Establishes a bromide reserve when used with brominating tablets

#### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	COMPONENT	%	OSHA HAZARDOUS ?
7647-15-6	Sodium Bromide	99	Yes
	<i>All other components are non-hazardous.</i>	1	No

NOTE: See Section 8 for permissible exposure limits.

#### SECTION 3: HAZARDS IDENTIFICATION

##### EMERGENCY OVERVIEW

Odorless white crystalline solid.

WARNING! Harmful if swallowed. May be harmful if inhaled. May cause eye and skin irritation (see below under POTENTIAL HEALTH EFFECTS).

##### POTENTIAL HEALTH EFFECTS

**EYE:** Mild irritant.

**SKIN:** Not an irritant to intact skin. Slight irritant to abraded skin.

**INHALATION:** Irritant to upper respiratory tract. May cause respiratory depression.

**INGESTION:** May cause drowsiness, muscular in coordination, abdominal pain, nausea, and/or vomiting if ingested.

**CHRONIC EXPOSURE/CARCINOGENICITY:** Repeated skin contact may cause dermatitis. Repeated oral intake of bromides (>9 mg/kg body weight/day) may affect the central nervous system. Warning symptoms include mental dullness, slurred speech, weakened memory, apathy, anorexia, constipation, drowsiness, and loss of sensitivity to touch and pain.

This material is not known to cause cancer in animals or humans.

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** May cause respiratory depression, stinging, burning, and/or coughing if inhaled. May irritate eyes with stinging, watering, inflammation. May irritate skin with redness, swelling, and scab formation. May cause drowsiness, muscular in coordination, abdominal pain, nausea, and/or vomiting if ingested.

**AGGRAVATION OF PRE-EXISTING CONDITIONS:** None known.

**POTENTIAL ENVIRONMENTAL EFFECTS:** Sodium bromide is an inorganic salt, which fully dissociates in aquatic environment to bromide and sodium ions. It also undergoes degradation in soil to bromide ion (no further degradation or biodegradation will occur.)

## SECTION 4: FIRST AID MEASURES

### FIRST AID PROCEDURES

**EYE CONTACT:** Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Call a physician at once.

**SKIN CONTACT:** Remove contaminated clothing, wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before re-use. Get medical attention if irritation occurs.

**INHALATION:** Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Call a physician.

**INGESTION:** Do not induce vomiting unless directed to do so by medical personnel. Wash mouth thoroughly with plenty of water and give water to drink. *Do not give anything by mouth if the person is unconscious.* Call a physician at once.

**NOTE TO PHYSICIANS:** Not available.

## SECTION 5: FIRE FIGHTING MEASURES

**FLASH POINT:** Not available

**UPPER FLAMMABLE LIMIT:** Not available

**FLAMMABILITY CLASS (OSHA):** Not applicable

**AUTOIGNITION TEMPERATURE:** Not available

**LOWER FLAMMABLE LIMIT:** Not available

**FLAME PROPAGATION/BURNING RATE:** Not available

**UNIQUE FIRE PROPERTIES:** Will decompose from 800°C releasing poisonous and corrosive fumes of hydrogen bromide and sodium oxide.

**HAZARDOUS COMBUSTION PRODUCTS:** Will decompose from 800°C releasing poisonous and corrosive fumes of hydrogen bromide and sodium oxide.

**EXTINGUISHING MEDIA:** Use extinguishing media appropriate to surrounding fire.

**PROTECTION OF FIREFIGHTERS:** Use water to cool containers exposed to fire. Provide firefighters with self-contained breathing apparatus in positive pressure mode.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PERSONAL PROTECTIVE EQUIPMENT:** See Section 8 (Personal Protective Equipment).

**ENVIRONMENTAL PRECAUTIONS:** Sodium bromide is an inorganic salt, which fully dissociates in aquatic environment to bromide and sodium ions. It also undergoes degradation in soil to bromide ion (no further degradation or biodegradation will occur.)

**METHODS FOR CLEANING UP:** Sweep up and place in bag and half for waste disposal or possible re-use. Ventilate area and wash spill site after material pickup is complete.

## **SECTION 7: HANDLING AND STORAGE**

### **SAFE HANDLING RECOMMENDATIONS**

**VENTILATION:** Use with adequate ventilation.

**FIRE PREVENTION:** No special requirements, material is not flammable.

**SPECIAL HANDLING REQUIREMENTS:** Avoid bodily contact. Wash hands thoroughly after handling.

### **SAFE STORAGE RECOMMENDATIONS**

**CONTAINMENT:** Keep container closed when not in use.

**STORAGE ROOM RECOMMENDATIONS:** Keep in a well-ventilated room away from incompatible materials.

**INCOMPATIBLE MATERIALS:** Strong acids, strong oxidizers, heavy metal salts. Reacts explosively with bromine trifluoride.

**STORAGE CONDITIONS:** Do not allow product to be heated above 800°C.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limits.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**EYE/FACE PROTECTION:** Wear safety glasses with side shields or goggles.

**SKIN PROTECTION:** Lab coat.

**HAND PROTECTION:** Wear gloves.

**RESPIRATORY PROTECTION:** Use a dust mask/respirator. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**GOOD HYGIENE/WORK PRACTICES:** Always follow good hygiene/work practices by avoiding vapors or mists and contact with eyes and skin. Thoroughly wash hands after handling and before eating or drinking. Always wear the appropriate PPE when repairing or performing maintenance on contaminated equipment.

### EXPOSURE GUIDELINES

PERMISSIBLE EXPOSURE LIMITS						
INGREDIENT CAS NO.	OSHA		WISHA		ACGIH (TLV)	
	TWA	STEL	TWA	STEL	TWA	STEL
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**COLOR:** White

**PHYSICAL FORM:** Solid

**pH:** Not available

**VAPOR DENSITY:** Not available

**MELTING POINT:** 755°C

**SOLUBILITY IN WATER:** 94.6g/100ml @ 25°C

**SHAPE:** Crystalline

**ODOR:** Odorless

**VAPOR PRESSURE:** 1mm Hg @ 806°C

**BOILING POINT:** 1390°C

**FREEZING POINT:** Not available

**SPECIFIC GRAVITY OR DENSITY:** 3.203

*NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.*

## SECTION 10: STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** Stable under normal conditions.

**CONDITIONS TO AVOID:** Heating above decomposition temperature of 800°C

**MATERIALS TO AVOID (INCOMPATIBILITY):** Strong acids, strong oxidizers, heavy metal salts. Reacts explosively with bromine trifluoride.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Will decompose from 800°C releasing poisonous and corrosive fumes of hydrogen bromide and sodium oxide.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

**ORAL LD<sub>50</sub> (rat):** 4200 mg/kg

**DERMAL LD<sub>50</sub> (rabbit):** >2000 mg/kg

**DERMAL LD<sub>50</sub> (rat):** >2000 mg/kg

**INHALATION LC<sub>50</sub> (rabbit):** Not available.

**SKIN IRRITATION (rabbit):** Not an irritant

**EYE IRRITATION (rabbit):** Slightly irritating

**SKIN SENSITIZATION (guinea pig):** Not a sensitizer

**ADDITIONAL INFORMATION:**

**MUTAGENICITY:** Does not induce DNA repair in cultured human epitheloid cells. Not clastogenic in human lymphocytes metaphase analysis. Not mutagenic by the Ames test.

**REPRODUCTIVE TOXICITY:** Sodium bromide has been shown to cause embryo-fetal toxicity and malformations in rats at dose levels, which also produce maternal toxicity. The no-observed effect level (NOEL) is 100 mg/kg/day, and the acceptable daily intake (ADI) for sodium bromide from food and drinking water in humans is 1 mg/kg/day. Comparable high doses of sodium chloride (table salt) similarly cause malformations, embryo-fetal toxicity, and maternal toxicity in mice.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY:** Not available.

**MOBILITY:** Not available.

**PERSISTENCE AND DEGRADABILITY:** Not available.

**BIOACCUMULATIVE POTENTIAL:** Not likely to occur since this material is highly soluble in water.

**ADDITIONAL INFORMATION:**

**ENVIRONMENTAL FATE:** Sodium bromide is an inorganic salt, which fully dissociates in aquatic environment to bromide and sodium ions. It also undergoes degradation in soil to bromide ion (no further degradation or biodegradation will occur.)

**AQUATIC TOXICITY:**

**96 HOUR LC<sub>50</sub> (rainbow trout):** >1000 mg/l

**96 HOUR LC<sub>50</sub> (bluegill sunfish):** >1000 mg/l

**48 HOUR EC<sub>50</sub> (daphnia magna):** >1000 mg/l

**AVIAN TOXICITY:**

**ORAL LD<sub>50</sub> (bobwhite quail):** >2250 mg/kg

**DIETARY LC<sub>50</sub> (mallard duck):** >5633 ppm

**DIETARY LC<sub>50</sub> (bobwhite quail):** >5633 ppm

**SECTION 13: DISPOSAL CONSIDERATIONS**

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

*NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.*

<b>SECTION 14: TRANSPORT INFORMATION</b>
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**U.S. DEPARTMENT OF TRANSPORTATION (DOT):**

<b>Proper Shipping Name:</b>	Not Regulated
<b>Hazard Class:</b>	Not Regulated
<b>Identification Number (UN Number):</b>	Not Regulated
<b>Packing Group (PG):</b>	Not Regulated

<b>SECTION 15: REGULATORY INFORMATION</b>
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**TSCA STATUS:** Listed**CERCLA REPORTABLE QUANTITY (RQ):**

CHEMICAL NAME	RQ
Not applicable	Not applicable

**SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS):**

CHEMICAL NAME	TPQ	RQ
Not applicable	Not applicable	Not applicable

**SARA TITLE III SECTION 311/312 HAZARD CATEGORIES:** Does this product/material meet the definition of the following hazard classes according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of SARA Title III?

ACUTE HEALTH HAZARD	CHRONIC HEALTH HAZARD	FIRE HAZARD	REACTIVE HAZARD	SUDDEN RELEASE OF PRESSURE
YES	YES	NO	NO	NO

**SARA TITLE III SECTION 313 TOXIC CHEMICALS INFORMATION:**

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

**CALIFORNIA PROPOSITION 65:** The following chemical(s) is/are known to the state of California to cause cancer or reproductive toxicity:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

<b>SECTION 16: OTHER INFORMATION</b>
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**REVISION INFORMATION:**

MSDS sections(s) changed since last revision of document: Section 1. Corporate address was updated.

**DISCLAIMER:**

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**MSDS PREPARED BY: Jeremy Heath, EH&S Specialist**