

SAFETY DATA SHEET

Date Issued : 2/6/2009
MSDS No : SeaKlear Problem Klear
Date Revised : 7/10/2013
Revision No : 2

SeaKlear Problem Klear

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SeaKlear Problem Klear
GENERAL USE: Algacide
PRODUCT DESCRIPTION: Bromide solution
ACTIVE INGREDIENT(S): Sodium Bromide

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: May cause irritation to skin, eyes and respiratory system. Harmful by ingestion. Avoid breathing vapors, contact with eyes, skin and clothing. Use with adequate ventilation.

POTENTIAL HEALTH EFFECTS

EYES: May cause eye irritation with redness or pain. May cause superficial injury, tearing and eye discharge.

SKIN: May cause skin irritation.

INGESTION: May cause vomiting, digestive disorders, high blood pressure, kidney damage, paralysis and coma.

INHALATION: May cause irritation to the respiratory tract. Additional effects may include coughing and shortness of breath.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS	EINECS
Sodium Bromide	40	7647-15-6	231-599-9

4. FIRST AID MEASURES

EYES: Hold eyelids apart and immediately flush with plenty of water for at least 15 minutes. Call a physician immediately.

SKIN: Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION: DO NOT INDUCE VOMITING. Give water if able to swallow. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

INHALATION: Remove to fresh air. Consult a physician.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Flammable

FLAMMABLE LIMITS: 0 to 0

EXTINGUISHING MEDIA: Dry chemical, CO₂, water spray or regular foam. Use extinguishing media appropriate for surrounding fire.

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HAZARDOUS COMBUSTION PRODUCTS: May generate bromine gas in the presence of strong oxidizing agents.

FIRE FIGHTING PROCEDURES: Avoid breathing fumes. Move containers from fire area if able to do so without risk. Prevent runoff into water sources.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Do not touch spilled material. Minimize airborne spreading of vapors. Clean up spill immediately. Contain and/or absorb spill with inert material (e.g., sand or vermiculite). Flush spill area with water. use appropriate containers to avoid environmental contamination.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Wash thoroughly after handling.

STORAGE: Store in a cool dry place. Do not reuse container. Keep away from strong acids and strong oxidizing agents. Corrosive to aluminum.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Sodium Bromide	TWA	[1]	[1]	[1]	[1]
Footnotes:					
1. Not established.					

ENGINEERING CONTROLS: Local exhaust.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields or goggles.

SKIN: Chemical-resistant gloves.

RESPIRATORY: General room ventilation is normally adequate.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: None.

APPEARANCE: Blue liquid.

pH: 6.8

VAPOR PRESSURE: 17.5 mm of Hg @ 20 deg C

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VAPOR DENSITY: Not Determined.
BOILING POINT: 112°C (234°F)
FLASHPOINT AND METHOD: Not Flammable
SOLUBILITY IN WATER: Miscible
EVAPORATION RATE: Not Available
SPECIFIC GRAVITY: 1.410

10. STABILITY AND REACTIVITY

STABILITY: Stable.
POLYMERIZATION: Will not occur.
CONDITIONS TO AVOID: Extremely high heat.
HAZARDOUS DECOMPOSITION PRODUCTS: May generate bromine gas in the presence of strong oxidizing agents.
INCOMPATIBLE MATERIALS: Acids and oxidizers. Corrosive to aluminums.

11. TOXICOLOGICAL INFORMATION

ACUTE
ORAL LD₅₀: 7000 mg/kg (mice)
NOTES: Oral TDLO: 3150 mg/kg (6 weeks, continuous, rat)
Subcutaneous LD50: 5020 mg/kg (mouse)
CHRONIC: May cause gastrointestinal, skin and nervous system irritaion.
CARCINOGENICITY
Notes: None of the components in this product are listed by IARC, NTP, OSHA or ACGIH as carcinogen.
TERATOGENIC EFFECTS: 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 per day, and the acceptable daily intake (ADI) for sodium bromide from food and drinking water in humans is 1 mg/kg per day. Comparable high doses of sodium chloride (table salt) similarly cause malformation, embryo-fetal toxicity, and maternal toxicity in mice.

In the oral gavage pre-natal developmental toxicity study in the Rabbit, there were no obvious effects of maternal treatment on the survival, growth or development of the offspring at any of the dosages investigated. The No Observed Effect Level (NOEL) for the developing conceptus was considered to be 250 mg/kg/day.

MUTAGENICITY: Does not induce DNA repair in cultured human epitheliod cells. Not clastogenic in human lymphocytes metaphase analysis. Not mutagenic by the Ames test.
COMMENTS: Local effects: Eye, mucous membrane and skin irritant.

Health Effects: Moderately toxic by ingestion.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Sodium bromide is an inorganic salt, which fully dissociates in aquatic environment to bromide and sodium ions. It

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also undergoes degradation in soil to bromide ion (no further degradation or biodegradation will occur.)

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of in accordance with applicable local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** Yes **ACUTE:** Yes **CHRONIC:** No

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: No.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Sodium Bromide	7647-15-6

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

CALIFORNIA PROPOSITION 65: There are no chemicals present known to the State of California to cause cancer.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT): This is an EPA-registered product.

16. OTHER INFORMATION

REVISION SUMMARY: This MSDS replaces the 3/27/2009 MSDS. Revised: **Section 2:** POTENTIAL HEALTH EFFECTS (INHALATION). **Section 4:** INGESTION. **Section 5:** EXTINGUISHING MEDIA. **Section 6:** GENERAL PROCEDURES. **Section 7:** HANDLING. **Section 11:** CHRONIC, COMMENTS. **Section 15:** CALIFORNIA PROPOSITION 65.

HMIS RATING

HEALTH	<input type="checkbox"/>	2
FLAMMABILITY	<input type="checkbox"/>	0
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

MANUFACTURER DISCLAIMER: Although reasonable care has been taken in the preparation of this document, we extend no warranties and

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