



Albemarle Corporation
Material Safety Data Sheet
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For Emergencies Only - Phone (225) 344-7147
For Non-Emergency Health & Safety Phone 1-800-535-3030
Representing Albemarle Foreign Sales Corporation
for Export Sales

ISSUE DATE: 01/24/08
SUPERSEDES: 10/26/2007
HMIS CLASSIFICATIONS:
HEALTH: 3
FLAMMABILITY: 0
REACTIVITY: 0

PRODUCT IDENTIFICATION

PRODUCT NAME: STABROM(R) 909 Biocide
CHEMICAL NAME: Proprietary
CAS NO.: Mixture - not applicable.
CHEMICAL FORMULA: Proprietary mixture
CHEMICAL FAMILY: Stabilized bromine biocide, aqueous solution
STABROM is a registered trademark of Albemarle Corporation.

SUMMARY OF HAZARDS

Causes irreversible eye damage.
Causes burns to the skin.
Harmful if swallowed or absorbed through the skin.
Can decompose exothermically at elevated temperatures (see
Environmental Protection, Storage Requirement section
for details).

OSHA HAZARDOUS COMPONENTS

Table with 4 columns: CHEMICAL NAME, CAS NO., NOTE, EXPOSURE LIMIT. Rows include Unreacted Sodium hydroxide and STABROM 909 Biocide.

NOTE: Carcinogenicity listing of components at concentrations
greater than or equal to 0.1% indicated by: @=NTP; #=IARC;
&=OSHA; +=ACGIH; *=OTHER; ND=Not Designated.

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CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE/ODOR: Yellow liquid/mild odor.

BOILING POINT: Approximately 106C/223F.

VAPOR PRESSURE: 19 mm Hg @ 25C/77F.

SOLUBILITY IN WATER: Miscible.

SPECIFIC GRAVITY: 1.29-1.37 @ 25/25C.

MOLECULAR WEIGHT: Proprietary

MELTING POINT: Freezing Point: Approximately 0C/32F.

PH: 12.4 (min.).

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FIRE AND EXPLOSION HAZARDS

FLASH POINT(METHOD): Not applicable.

FLAMMABLE LIMITS: Not applicable.

EXTINGUISHING MEDIA: None required.

SPECIAL FIRE FIGHTING PROCEDURES: Avoid breathing fumes.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: Include bromine and chlorine.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

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REACTIVITY DATA

STABILITY: Stable.

CONDITIONS TO AVOID: High temperature/heat/freezing/light, especially direct sunlight. Use of incompatible materials can promote the exothermic decomposition of the product.

MATERIALS TO AVOID: This product is strongly basic and an oxidizing agent. Avoid contact with alcohols, aldehydes, strong reducing agents, strong oxidizers, acids, ammonia-containing products, and common metals such as steel, aluminum, iron and copper.

HAZARDOUS POLYMERIZATION: Will not occur.

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HEALTH HAZARDS

INHALATION: Not expected to be toxic. Do not breathe fumes from fires or decomposition.

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EYE CONTACT: Causes irreversible eye damage.

SKIN CONTACT: Causes burns to the skin. May be harmful if absorbed through the skin.

INGESTION: Harmful if swallowed.

CHRONIC EFFECTS OF OVEREXPOSURE: None known.

TOXICITY DATA: ACUTE ORAL TOX LD50 = 2,491 mg/kg of body weight; ACUTE DERMAL TOX LD50 = >2,000 mg/kg of body weight; ACUTE INHALATION LC50 = >20.37 mg/l. Not a contact Dermal Sensitizer; Corrosive to skin.

AQUATIC TOXICITY DATA: ORGANISM: Bluegill Sunfish Lepomis Macrochirus - TOXICITY RESULTS: 96-hour LC50 value was 3.8 mg whole material/L. ORGANISM: Waterflea Daphnia magna - TOXICITY RESULTS: 48-hour EC50 value was 4.8 mg whole material/L. ORGANISM: Unicellular Green Alga, Selenastrum capricornutum - TOXICITY RESULTS: 96-hour IC50 value was 2.6 mg whole material/L.

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EMERGENCY FIRST AID PROCEDURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

EYE CONTACT: If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN CONTACT: If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

INGESTION: If swallowed, call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

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EXPOSURE CONTROL INFORMATION

EXPOSURE LIMITS: Not established by OSHA/ACGIH.

EYE PROTECTION: Chemical goggles or face shield.

PROTECTIVE GLOVES: Rubber gloves resistant to chemical

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permeation.

RESPIRATORY PROTECTION: None under normal conditions. In irritating atmospheres use NIOSH approved acid gas respirator.

MECHANICAL VENTILATION: Use and store in well-ventilated area.

OTHER: Protective clothing.

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ENVIRONMENTAL PROTECTION

SPILLS OR LEAKS: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Take up small spills by first diluting with water and then using a dehalogenating agent such as sodium thiosulfate solution. Large spills may be taken up with pump or vacuum and finished off with dry chemical absorbent. May require excavation of contaminated soil.

DISPOSAL METHODS: Under the CERCLA/RCRA regulations currently in effect, this material could be regulated as a hazardous waste or material. Therefore, it must be disposed of in a 'permitted' hazardous waste facility in compliance with EPA and/or other applicable local, state, and federal regulations. It should be handled in a manner acceptable to good waste management practice. Following neutralization to render the material nonhazardous, the material may be disposed of in a manner acceptable to good waste management practice and in compliance with applicable local, state, and federal regulations.

The Reportable Quantity of this product is 20,000 pounds minimum based on the sodium hydroxide content of the product.

STORAGE REQUIREMENTS: STORAGE CONDITIONS: Avoid freezing, excessive heat or exposure to light, especially direct sunlight. If heating is necessary to prevent freezing, care must be taken to prevent overheating. Precautions should be taken to ensure that the average product temperature is maintained below 110F. Temperature monitoring is recommended. At elevated temperatures, self-heating can lead to vigorous gas generation and over-pressurization of storage containers if appropriate controls are not in place. Avoid exposure of this product to incompatible materials/chemicals (see Reactivity Data section). Use of incompatible materials can promote the exothermic decomposition of the product. In extreme cases, this could result in vigorous gas formation and over-pressurization of the storage container. STORAGE CONTAINER: Vented and opaque containers: As the product ages, activity is gradually lost and pressure can build-up in the headspace (nitrogen); therefore, the product should be stored in vented containers. Product should also be stored in opaque containers to prevent exposure to light. To

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maximize product shelf life, store the product in an opaque container, in a cool, dry, well-ventilated area.

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ADDITIONAL PRECAUTIONS OR COMMENTS

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REGULATORY INFORMATION

TSCA:

THIS MATERIAL IS EXEMPT FROM THE TOXIC SUBSTANCES CONTROL ACT (15 USC 2601-2629).

DOT DESCRIPTION/PROPER SHIPPING NAME:

CORROSIVE LIQUIDS, BASIC, INORGANIC, N.O.S.
(HALOGENATED COMPLEX, SODIUM HYDROXIDE)
See Note 1.

DOT HAZARD CLASS: 8 (CORROSIVE)

DOT ID NUMBER: UN3266

DOT PACKING GROUP: III

HAZARD CATEGORIES FOR SARA 311/312 REPORTING ARE INDICATED BELOW:

HEALTH	Immediate (Acute)	Yes
HEALTH	Delayed (Chronic)	No
PHYSICAL	Fire	No
PHYSICAL	Sudden Release of Pressure	No
PHYSICAL	Reactive	No
	Nuisance Mist/Dust Only	No

NOTE 1: See CERCLA for Reportable Quantity.

COMPONENT NAME	CAS NO.	PERCENTAGE	REGULATION
Unreacted Sodium hydroxide	1310-73-2	5.0	CERCLA
CERCLA --- RQ=1000			NJ RTK-SHH PA.RTK

(Typical value of sodium hydroxide is <5%.)

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ADDRESS CONTACT INFORMATION

MSDS prepared by: Health & Environment Department
Albemarle Corporation

FOR ADDITIONAL NONEMERGENCY PRODUCT INFORMATION, CONTACT:

HEALTH AND ENVIRONMENT DEPARTMENT
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451 FLORIDA ST.
BATON ROUGE, LA. 70801
(800) 535-3030

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THIS MATERIAL SAFETY DATA SHEET CONTAINS AT LEAST THE INFORMATION REQUIRED BY THE FEDERAL OSHA HAZARD COMMUNICATION RULE, 29 CFR 1910.1200(g) (2).

THE RESPONSIBILITY TO PROVIDE A SAFE WORKPLACE REMAINS WITH USER. THE USER SHOULD CONSIDER THE HEALTH HAZARDS AND SAFETY INFORMATION CONTAINED HEREIN AS A GUIDE AND SHOULD TAKE THOSE PRECAUTIONS REQUIRED IN AN INDIVIDUAL OPERATION TO INSTRUCT EMPLOYEES AND TO DEVELOP WORK PRACTICE PROCEDURES FOR A SAFE WORK ENVIRONMENT.

THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. HOWEVER, BECAUSE THE CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS, AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY THE USE OF THIS MATERIAL. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

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