

SAFETY DATA SHEET

SANIBROM® 40 Biocide

Preparation Date : 29-May-2008

Revision Date: 28-Oct-2014

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier**Product Name** SANIBROM® 40 Biocide**Other means of identification****Chemical Family** Metal Bromide**CAS-No** Mixture**Formula** NaBr/H₂O**Recommended use of the chemical and restrictions on use****General function** Water treatment chemical.**Uses advised against** No information available**Details of the supplier of the safety data sheet****Company** Albemarle Corporation
451 Florida Street
Baton Rouge, LA 70801**For Non-Emergency** 800-535-3030**'Competent Body for SDS'** HSE@Albemarle.com**Emergency telephone number****Emergency Telephone Numbers** +1-225-344-7147

2. HAZARDS IDENTIFICATION

Classification**OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Label elements**Emergency Overview**

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Liquid**Color** Clear. Light yellow to water white.**Odor** Mild.**Prevention**

Wash hands thoroughly after handling

Response

Get medical advice/attention if you feel unwell

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

IF ON SKIN: Wash with plenty of soap and water

IF INHALED: Move to fresh air.

IF SWALLOWED: Rinse mouth Drink plenty of water

Hazards not otherwise classified (HNOC)
Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Sodium bromide	7647-15-6	38-42

Note: The exact concentrations of the above listed chemicals are being withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

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.

Inhalation Move to fresh air.

Ingestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media Not combustible. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

Combustion/explosion hazards Not combustible.

Hazardous Combustion Products Bromine.

Explosion Data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Protective Equipment and Precautions for Firefighters

In the event of fire and/or explosion do not breathe fumes. Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. Wear suitable protective equipment.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning up Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Take up small spills with dry chemical absorbent. Large spills may be taken up with pump or vacuum and finished off with dry chemical absorbent. Large spills should be collected mechanically (remove by pumping) for disposal. May require excavation of contaminated soil.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face Protection Chemical goggles or safety glasses.

Skin Protection Wear protective gloves/clothing.

Respiratory protection None under normal conditions.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Color	Clear. Light yellow to water white.
Odor	Mild.
Odor Threshold	No information available
Molecular Weight	No information available
pH	Not available
Melting point/freezing point	No information available
Boiling Point/Range	~ 112 °C / 234 °F
Flash Point	Non flammable.
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor Pressure	2333.135 (20°C for aqueous portion)

Vapor Density	No information available
Relative density	1.41 (21°C)
Solubility(ies)	
Water Solubility	Miscible.
Solubility in other solvents	No information available
Partition coefficient	
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Dynamic viscosity	2 cP (21°C)
Explosive Properties	No information available
Oxidizing Properties	No information available

10. STABILITY AND REACTIVITY

Reactivity Hazard	No data available
Stability	Stable.
Hazardous Reactions	No hazardous reaction expected under normal handling.
Hazardous Polymerization	None under normal processing.
Conditions to Avoid	Avoid extremely high heat.
Materials to avoid	Avoid strong acids and oxidizing agents. Avoid contact with common metals such as aluminum, iron, copper, brass and steel.
Hazardous decomposition products	Bromine.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Not an expected route of exposure.
Eye contact	Not irritating.
Skin Contact	Not irritating.
Ingestion	Not expected to be acutely toxic.

Potential Health Effects

Acute Effects

Skin corrosion/irritation Not irritating.

Serious eye damage/eye irritation No eye irritation.

Respiratory irritation : Not irritating.

Sensitization Not a skin sensitizer.

Chronic Effects

Mutagenic Effects No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	ACGIH Carcinogens	IARC	NTP	OSHA Carcinogens
Sodium bromide	7647-15-6	-	-	-	-

Reproductive Effects No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic Effects None known
Aspiration hazard No information available.

Numerical measures of toxicity

Product Information No information available

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 8500 mg/kg
ATEmix (dermal) 5002 mg/kg

Component Information No information available

Component	Rat Oral LD50 :	Rabbit Dermal LD50 :	Rat Inhalation LC50:
Sodium bromide 7647-15-6	4200 mg/kg bw	>2000 mg/kg bw	-

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae EC50/72h :	Freshwater Fish LC50/96h :	Water Flea EC50/48h :
Sodium bromide (CAS #: 7647-15-6)	440 mg/l	440 mg/l	1000 mg/l

Persistence/Degradability No information available.
Bioaccumulation/ Accumulation No information available.
Mobility in Environmental Media No information available.
Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name NOT REGULATED FOR TRANSPORTATION
 Hazard Class Not regulated
 UN No. Not regulated
 Packing Group Not regulated
 Description Not regulated

IMDG/IMO

IMO Class Not regulated
 Packing Group Not regulated
 UN-No Not regulated
 IMO Labelling and Marking Not regulated
 Proper Shipping Name Not regulated
 EmS Not regulated
 Marpol - Annex II Not regulated
 Marpol - Annex III Not regulated
 Transport Description Not regulated

IATA/ICAO

IATA/ICAO Class Not regulated
 Packing Group Not regulated
 UN-No Not regulated
 IATA/ICAO Labelling/Marking Not regulated
 Passenger Aircraft Not regulated
 Cargo aircraft only Not regulated
 Proper shipping name Not regulated
 Transport Description Not regulated

15. REGULATORY INFORMATION											
International Inventories	TSCA	DSL	NDSL	AICS	EINECS	ELINCS	ENCS	KECL	PICCS	IECSC	NZIoC
SANIBROM® 40 Biocide	X	X	-	X	X	-	X	X	X	X	X

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard No
 Chronic Health Hazard No
 Fire Hazard No
 Sudden Release of Pressure Hazard No
 Reactive Hazard No

Reportable and Threshold Planning Quantities

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Right-to-Know

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazards

Non-controlled

16. OTHER INFORMATION

NFPA	Health 0	Flammability 0	Instability 0	Physical Hazards -
HMIS	Health 0	Flammability 0	Physical Hazards 0	

Prepared By Health & Environment Department
Albemarle Corporation

FOR ADDITIONAL NONEMERGENCY PRODUCT INFORMATION, CONTACT:

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BATON ROUGE, LA. 70801
(800) 535-3030

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Disclaimer:

The information contained herein is accurate to the best of our knowledge. The Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

End of Safety Data Sheet