Material Safety Data Sheet

SODIUM BROMIDE 45 Solution (RXSOL-81-1617-1000)

1. Product and Company Identifaction

Product Name	SODIUM BROMIDE 45 Solution
Part Number	RXSOL-81-1617-1000

Company Details:....

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone	+91 22 20871200 - 1400
Fax	+91 22 27612100 :::AOH :0091 9821214367
Email	mail@rxmarine.com
Website	www.rxmraine.com

2. Composition / informationon ingredients

Component	CAS No	Weight %
Sodium bromide	7647-15-6	>45

3. Hazards Identification

Classification	This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Label elements	
Signal Word	Warning
Hazard Statements	May cause drowsiness or dizziness Suspected of damaging fertility. Suspected of damaging the unborn child May cause damage to organs through prolonged or repeated exposure
Precautionary Statements	Prevention Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Response IF exposed or concerned: Get medical attention/advice Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Storage Store locked up Store in a well-ventilated place. Keep container tightly closed Disposal Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)	None identified

4. First Aid Measures

Description of first aid measures

General Advice	If symptoms persist, call a physician.

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Getmedical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritationpersists,call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attentionif symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attentionif symptoms occur.
Most important symptoms and effects	None reasonably foreseeable
Notes to Physician	Treat symptomatically

5. Fire-fighting Measures

Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and thesurrounding environment.
Unsuitable Extinguishing Media	No information available
Flash Point	No information available
Method	No information available
Autoignition Temperature	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. No information available
Explosion Limits	
Upper	No data available
Lower	No data available spray to keep fire-exposed containers cool.Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Specific Hazards Arising from the Chemical	Non-combustible. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty containeraway from heat and sources of ignition.
Hazardous Combustion Products	Hydrogen halides. Sodium oxides.
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) andfull protective gear.

6. Accidental Release Measures

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment as required. Avoiddust formation.
Environmental Precautions	Do not flush into surface water or sanitary sewer system.
Methods for Containment and Clean Up	Sweep up and shovel into suitable containers for disposal. Keep in suitable, closedcontainers for disposal.

7. Handling and Storage

Handling	Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoiddust formation. Do not get in eyes, on skin, or on clothing. Avoid ingestion andinhalation.
Storage	Keep container tightly closed. Keep in a dry, cool and well-ventilated place. Storeunderaninert atmosphere. Keep container tightly closed in a dry and well-ventilated place. Protect from moisture. Incompatible Materials. Strong oxidizing agents. Strong acids. Halogens.

8. Exposure controls and personal protection

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposurelimitsestablished by the region specific regulatory bodies.
Engineering Measures	Ensure adequate ventilation, especially in confined areas. Ensure that eyewashstationsand safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as describedbyOSHA's eye and face protection regulations in 29 CFR 1910.133 or EuropeanStandard EN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or EuropeanStandardEN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Recommended Filter type	Particle filter
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Powder Solid
Appearance	White
Odor	No information available
Odor Threshold	No information available
pH	5-8.8 5% aq. solution
Melting Point/Range	755 °C / 1391 °F
Boiling Point/Range	1390 °C / 2534 °F @ 760 mmHg
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	905 g/L (20°C)
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	800 °C
Viscosity	Not applicable
Molecular Formula	Br Na
Molecular Weight	102.89

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Hygroscopic.
Conditions to Avoid	To avoid thermal decomposition, do not overheat. Incompatible products. Exposuretomoistair or water.
Incompatible Materials	Strong oxidizing agents, Strong acids, Halogens
Hazardous Decomposition Products	Hydrogen halides, Sodium oxides
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute toxicity
Product Information
Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium bromide	LD50 = 3500 mg/kg (Rat)	>2000 mg/kg (Rabbit)	Not listed

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	No information available
Sensitization	No information available
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as acarcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium bromide	7647-15-6	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects	Not mutagenic in AMES Test
Reproductive Effects	No information available.
Developmental Effects	No information available.
Teratogenicity	No information available.
STOT - single exposure	Central nervous system (CNS)
STOT - repeated exposure	None known
Aspiration hazard	No information available
Symptoms / effects,both acute and delayed	No information available
Endocrine Disruptor Information	No information available
Other Adverse Effects	The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity Contains a substance which is:. Very toxic to aquatic organisms. The product contains following substances which arehazardousfor the environment.

Component	CAS No	Freshwater Algae	Microtox	Water Flea

Sodium bromide	EC50: 5800 - 24000 mg/L, 96h (Scenedesmus pannonicus)	LC50: > 1000 mg/L, 96h static (Oncorhynchus mykiss) LC50: 24000 - 96000 mg/L, 96h flow-through (Oryzias latipes) LC50: = 24000 mg/L, 96h semi-static (Oryzias latipes) LC50: 16000 - 24000 mg/L, 96h flow-through (Poecilia reticulata) LC50: = 16000 mg/L, 96h semi-static (Poecilia reticulata) LC50: 0.054 - 0.081 mg/L, 96h flow-through (Oncorhynchus mykiss) LC50: > 1000 mg/L, 96h static (Lepomis macrochirus) LC50: 15614 - 17428 mg/L, 96h static (Pimephales promelas)	-	EC50: 5700 - 10800 mg/L,48h Static (Daphnia magna)EC50: 5800 - 48000 mg/L,48h (Daphnia magna)

Persistence and Degradability	Soluble in water Persistence is unlikely based on information available.
Bioaccumulation/ Accumulation	No information available.
Mobility	Will likely be mobile in the environment due to its water solubility

13. Disposal considerations

Waste Disposal Methods	Chemical waste generators must determine whether a discarded chemical is classifiedasahazardous waste. Chemical waste generators must also consult local, regional, andnational hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT	Not regulated
TDG	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA RegulatoryFlags
Sodium bromide	7647-15-6	X	ACTIVE	-

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)	Not applicable
TSCA 12(b) - Notices of Export	Not applicable

International Inventories	Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea(KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sodium bromide	7647-15-6	X	-	231-599-9	X	X	X	X	X	KE-31368

U.S. Federal Regulations

SARA 313	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not containanychemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372
SARA 311/312 Hazard Categories	Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriateclassifications.
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	This material, as supplied, does not contain any substances regulated as hazardous substances under the ComprehensiveEnvironmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments andReauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or statelevel pertaining to releases of this material.
California Proposition 65	This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations	Not applicable
U.S. Department of Transportation	
Reportable Quantity (RQ)	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N
U.S. Department of Homeland Security	This product does not contain any DHS chemicals
Other International Regulations	
Mexico - Grade	No information available
Authorisation/Restrictions according to EU REACH	Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC1907/2006) article 59 -Candidate List of Substances of Very High Concern (SVHC)
Sodium bromide	7647-15-6	-	-	-

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Sodium bromide	7647-15-6	Listed	Not applicable	Not applicable	Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention(Hazardous Waste)
Sodium bromide	7647-15-6	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

Other Information

DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.