SAFETY DATA SHEET

1. Identification

Product Name Sodium bromide

Cat No. : AC246900000; AC246900025; AC246901000; AC246905000

CAS No 7647-15-6
Synonyms NaBr.

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Reproductive Toxicity Category 2 Specific target organ toxicity (single exposure) Category 3
Target Organs - Central nervous system (CNS).
Specific target organ toxicity - (repeated exposure) Category 2

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

3. Composition/Information on Ingredients

Component	CAS No	Weight %
Sodium I	7647-15-6	>95

4. 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.

None reasonably foreseeable.

Most important symptoms and effects
Notes to Physician Treat symptomatically

5. Fire-fighting measures

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 No information available
Explosion Limits
Upper No data available
Lower No data available
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.

NFPA

Health	Flammability	Instability	Physical hazards
2	0	1	N/A

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. Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Methods for Containment and Clean Up

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 / 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 describedby OSHA'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

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

No information available

Toxicologically Synergistic Products

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	NT	ACGIH	OSH	Mexi
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	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium bromide	EC50: 5800 - 24000 mg/L, 96h (Scenedesmus pannonicus)	LC50: > 1000 mg/L, 96hstatic (Oncorhynchus mykiss) LC50: 24000 - 96000 mg/L,96h flow-through (Oryziaslatipes) LC50: = 24000 mg/L, 96hsemi-static (Oryzias latipes)LC50: 16000 - 24000 mg/L, 96h flow-through (Poeciliareticulata) LC50: = 16000 mg/L, 96hsemi-static (Poecilia reticulata) LC50: 0.054 - 0.081 mg/L,96h flow-through (Oncorhynchus mykiss)LC50: > 1000 mg/L, 96hstatic (Lepomis	-	EC50: 5700 - 10800 mg/L,48h Static (Daphnia magna)EC50: 5800 - 48000 mg/L,48h (Daphnia magna)

		macrochirus)LC50: 15614 - 17428 mg/L,96h static (Pimephalespromelas)		

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, and national 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	-

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

Not applicable

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)

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	P	E	I	AIC	IECSCKEC
Sodium bromide	7647-15-6		X	231-599-						XKE-31368

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

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

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. Not applicable

U.S. State Right-to-Know Regulations

U.S. Department of Transportation
Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

This product does not contain any DHS chemicals.

U.S. Department of Homeland Security

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - SubstancesSubject to Authorization	REACH (1907/2006) -Annex XVII - Restrictions on Certain 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 DepletionPotential	Restriction of Hazardous Substances (RoHS)
Sodium bromide	7647-15-6	Listed	Not applicable	Not applicable	Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Other International Regulations

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantitiesfor Major AccidentNotification	Seveso III Directive(2012/18/EC) - Qualifying Quantitiesfor 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

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Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information andbelief at thedate of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage,transportation, disposal and release and is not to be considered a warranty or quality specification. The informationrelates only to the specific material designated and may not be valid for such material used in combinationwithanyothermaterials or in any process, unless specified in the text

End of SDS