



SAFETY DATA SHEET

Issuing Date 13 April 2015

Revision Date 13 April 2015

Revision Number 0

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

GHS product identifier

Product Name Sodium Bromide Solution

Other means of identification

Chemical Family Inorganic Salt

Recommended use of the chemical and restrictions on use

Recommended Use Oilfield additive

Uses advised against No information available

Supplier's details

Manufacturer Address

TETRA Technologies, Inc.
24955 Interstate 45 North
The Woodlands, TX 77380
TEL: 281-367-1983 (Non-Emergency Number)

Emergency telephone number

Emergency Telephone Number CHEMTREC: 1-800-424-9300 for US/ 703-527-3887 outside US

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Not classified

GHS Label elements, including precautionary statements

Emergency Overview

Signal Word None

Hazard Statements

• None

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

Precautionary Statements

Prevention

- None

General Advice

- None

Storage

- None

Disposal

- None

Hazard Not Otherwise Classified (HNOC)

Not applicable

Other information

May cause irritation to skin, eyes and respiratory system. Do not ingest.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Sodium Bromide	7647-15-6	1 - 48

4. FIRST AID MEASURES

Description of necessary first-aid measures

Eye Contact	Immediately flush eyes thoroughly with large amounts of water for 15-20 minutes. Hold eyelids open during flushing. Get medical attention immediately.
Skin Contact	Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent, and large amounts of water. In cases of burns, cover lightly with sterile, dry dressing. Get medical attention immediately.
Inhalation	Remove from exposure area to fresh air. Obtain medical attention immediately.
Ingestion	Do not attempt to give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

Most Important Symptoms/Effects No information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Negligible fire Hazard. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

Specific Hazards Arising from the Chemical

None

Explosion Data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid contact with the skin and the eyes. Use personal protective equipment.

Environmental Precautions

Environmental Precautions Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and materials for containment and cleaning up

Methods for Containment For small spills, take up with sand or other absorbent material and place into containers for later reclamation or disposal. For larger spills, dike far ahead of spill for later disposal.

Methods for Cleaning Up Take up and collect in suitable container for disposal. Use personal protective equipment.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep in a dry place.

Incompatible Products Strong oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

None established.

Appropriate engineering controls

Engineering Measures Provide local exhaust ventilations system. When there is a potential for exposure, an emergency eyewash and safety shower should be provided within the immediate work area.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with non-flexible side shields or chemical goggles

Skin and Body Protection	Wear appropriate protective, impervious clothing.
Respiratory Protection	A respirator is not indicated under normal operating conditions. Use of respirator should be based on contamination levels in the workplace.
Hygiene Measures	When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Clear
Odor	Odorless	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>
pH	5.5 – 8.5 @ 5% solution
Melting Point/Range	No data available
Boiling Point/Boiling Range	No data available
Flash Point	Not applicable
Molecular Weight	No data available
Flammability (solid, gas)	No data available
Flammability Limits in Air	
upper flammability limit	No data available
lower flammability limit	No data available
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Specific Gravity	1.01 – 1.53 @ 68°F (20°C)
Water Solubility	Completely
Solubility in other solvents	Slightly soluble in alcohol
Partition coefficient: n-octanol/water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	Not applicable
 Flammable Properties	 Not flammable
 Explosive Properties	 No data available
Oxidizing Properties	No data available

Other information

VOC Content (%)	Not applicable.
------------------------	-----------------

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal conditions.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to avoid

None.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

May generate bromine gas in the presence of strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information****Inhalation**

Vapor inhalation may cause irritation to mucous membranes and respiratory system. Additional effects may include coughing and shortness of breath.

Eye Contact

May cause irritation of eyes with redness and/or pain and superficial injury.

Skin Contact

Additional effects may include tearing and eye discharge.

Ingestion

Single, short exposure not likely to cause significant skin irritation. However, direct contact with solution may cause irritation.

Ingestion may cause vomiting, digestive disorders, high blood pressure, headache, kidney damage, paralysis and coma.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium Bromide	= 3500 mg/kg, (rat)	>2000 mg/kg (rabbit)	-

Symptoms related to the physical, chemical and toxicological characteristics**Symptoms** Eye, mucous membrane and skin irritant.**Delayed and immediate effects and also chronic effects from short and long term exposure****Eye damage/irritation**

May be irritating to eyes.

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenicity

Contains no ingredients above reportable quantities listed as a carcinogen.

Reproductive Toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Chronic Toxicity

No information available.

Aspiration Hazard

No information available.

Numerical measures of toxicity - Product

No information available

12. ECOLOGICAL INFORMATION**Ecotoxicity**

The environmental impact of this product has not been fully investigated. Avoid release to the environment.

Persistence and Degradability

Product is not biodegradable.

Bioaccumulation

Does not bioaccumulate.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS**Waste Disposal Methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

No information available.

14. TRANSPORT INFORMATION**DOT**

Not regulated

IMDG

Not regulated

ICAO / IATA

Not regulated

15. REGULATORY INFORMATION**International Inventories****TSCA**

Complies

DSL

Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

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.

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA	Health Hazard 1	Flammability 0	Instability 0	Physical and Chemical Hazards -
-------------	------------------------	-----------------------	----------------------	--

Prepared By	TETRA Technologies, Inc. sds@tetrattec.com
Issuing Date	13 April 2015
Revision Date	13 April 2015
Revision Note	Initial GHS format

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet