

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

1.1. GHS product identifier

Product Name – Zinc Bromide Solution

1.2. Other means of identification

Synonyms – 19.2ppg Zinc Bromide Solution

1.3. Recommended use of the chemical and restrictions on use

Recommended Use – Additive Brine

Uses advised against – No information available.

1.4. Supplier's detail

Supplier Address

Intech Organics Limited

Plot No - 27, Sector - 34

Gurgaon | Haryana - 122004

Email: info@intech.in

Web: www.intech.in

1.5. Emergency telephone number

Emergency Telephone Number – CHEMTREC: +1-800-424-9300 | Outside US: +91-124-4407000

2. HAZARDS IDENTIFICATION

2.1. Classification

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

Serious Eye Damage/Eye Irritation	Category 1
Irritating to skin	Category 1B
Acute Toxicity – Oral	Category 4
Sensitization – Skin	Category 1

HS/HTS Code: 2827.59.0000

2.2. GHS Label elements, including precautionary statements

Label Elements

Hazard Pictogram(s):



Signal Word: Danger

Hazard Statement: Harmful if Swallowed, causes severe skin burn and eye damage. May cause sensitisation by skin contact

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SAFETY DATA SHEET**2.3. Precautionary Statements**

Prevention	Do not breath mist, vapours, or spray of the product Wash thoroughly after handling Do not eat, drink or smoke while using the product Contaminated work clothing should be destroyed Wear full PPE set
Eyes	IF IN EYES: Rinse with water for a few minutes, being cautious. If contact lenses are present and easily removed, do so. Rinse again. Immediately call a POISON CENTER or doctor/physician.
Storage	Store locked up
Disposal	Dispose of contents/container in accordance with regional legislations & regulations.
Hazard Not Otherwise Classified (HNOC)	Not applicable
Other information	If Swallowed: Rinse mouth. Do not induce vomiting If on Skin: Rinse immediately with water. Call help If Inhaled: move to fresh air area If in eyes: Rinse with water If skin irritation: get medical help

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Zinc Bromide	7699-45-8	72-75	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**4.1. Description of necessary first-aid measures**

Eye Contact	Flush with lots of water right away. Take off your contact lenses after the first flush and keep flushing for at least fifteen minutes. When you rinse, keep your eyes wide open. Avoid rubbing the injured region. Get medical help or advice right away.
Skin Contact	Eliminate all contaminated clothing and footwear right away by washing with lots of water and soap. Before reusing, wash any compromised clothing. Contact a doctor if the skin irritation doesn't go away.
Inhalation	Move to fresh air. Get medical attention if symptoms occur.
Ingestion	NEVER try to make someone throw up. After washing your mouth with water, make sure you drink a lot of it. Never administer anything by mouth to someone who is unconscious. Seek medical assistance.

SAFETY DATA SHEET**4.2. Most important symptoms/effects, acute and delayed.**

Most Important Symptoms/Effects Burning. Red eyes. Tearing. Serious eye irritation or damage.

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

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES**5.1. Suitable Extinguishing Media**

Make use of extinguishing techniques that are suitable for the surrounding environment and local conditions.

Unsuitable Extinguishing Media No information available.

5.2. Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Hazardous Combustion Products: Hydrogen bromide. Bromine.

5.3. Explosion Data

Sensitivity to Mechanical Impact None

Sensitivity to Static Discharge None

5.4. Protective Equipment and Precautions for Firefighters

Wear complete protective gear, MSHA/NIOSH-approved or equivalent, and self-contained breathing equipment pressure demand, just like you would in any fire.

6. ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment, and emergency procedures**

Personal Precautions	Make sure there is enough airflow. Staff should be evacuated to safe areas. Keep individuals upwind and away from any spills or leaks. Put on personal safety gear. Steer clear of skin, eyes, and clothing contact. Steer clear of mists or fumes. Avoid stepping on or touching spilled material.
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SAFETY DATA SHEET**6.2. Environmental Precautions**

Environmental Precautions	Prevent entry into waterways, sewers, basements or confined areas
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6.3. Methods and materials for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Use an inert, absorbent substance to absorb. Gather and place in appropriately labelled containers.

7. ACCIDENTAL HANDLING AND STORAGE**7.1. Precautions for safe handling**

Handling	Do not swallow. Do not breathe mist, vapours, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. See Section 8 for information on Personal Protective Equipment.
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7.2. Conditions for safe storage, including any incompatibilities

Storage	Store Locked up. Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible Products	Acids. Water. Potassium.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1. Exposure Guidelines Component**

Zinc Bromide	CAS No. 7699-45-8
ACGIH:	No TLV Established (Threshold Limit Value)
OSHA:	NO PEL established (Permissible Exposure Limit)

8.2. Appropriate engineering controls

Engineering Measures	<p>Showers Eyewash stations Ventilation systems</p> 
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SAFETY DATA SHEET**8.3. Individual protection measures, such as personal protective equipment**

Eye/Face Protection	Tightly fitting safety goggles. If splashes are likely to occur, wear: Face-shield.
Skin and Body Protection	Impervious gloves. Lab coat and/or apron.
Respiratory Protection	Wearing respiratory protection that has been approved by NIOSH and MSHA is advised if exposure limits are exceeded, or irritation is experienced. In cases where the concentration of airborne contaminants is significant, positive pressure supplied air respirators might be necessary. Current local rules must be followed when providing respiratory protection.
Hand Protection	Chemical-resistant protective gloves (EN 374) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Nitrile gloves. (≥ 0.35 mm thickness). This information is based on literature references and on information provided by glove manufacturers or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 because of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed, then the gloves should be replaced. Manufacturer's directions for use should be observed.
Hygiene Measures	Observe safe handling procedures and excellent industrial hygiene when handling. Use this product without eating, drinking, or smoking anything. Steer clear of food, beverages, and animal feed. Before taking a break and right away after handling the lotion, wash your hands and face. Before reusing, remove and wash any affected garments. Maintain a clean work area, clothes, and equipment on a regular basis.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical State	Liquid	Appearance	Light yellow Amber
Odor	Odourless	Odor Threshold	No information available

Property	Values	Remarks/ - Method
pH	2-5	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	135 °C	for 72%

SAFETY DATA SHEET

Flash Point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air		
Upper Flammability Limit	No data available	
Lower Flammability Limit	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	None known
Specific Gravity	2.30 @ 70F (21C)	
Water Solubility	Soluble in water	
Solubility in Other Solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	No data available	None known
Flammable Properties	Not Flammable	
Explosive Properties	No data available	
Oxidizing Properties	No data available	
VOC Content (%)	No data available	

10. STABILITY AND REACTIVITY

Reactivity	Contact with incompatible material. Exposure to heat
Chemical Stability	Stable under recommended storage conditions
Possibility of Hazardous Reactions	None under normal processing
Hazardous Polymerization	Hazardous polymerization does not occur
Conditions to Avoid	Protect from moisture
Incompatible Materials	Acids, Water & Monovalent salts
Hazardous Decomposition Products	Hydrogen Bromide & Bromine

11. TOXICOLOGICAL INFORMATION**11.1. Information on likely routes of exposure**

Oral	NA
Dermal	NA
Inhalation	NA

SAFETY DATA SHEET**11.2. Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc Bromide	NA	NA	NA

11.3. Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Inhalation	Based on components: Causes irritation of respiratory tract
Eye Contact	Based on components: Causes serious eye damage. May cause irreversible damage to eyes
Skin Contact	Based on components: Causes irritation
Ingestion	Based on components: Causes gastrointestinal irritation, nausea, vomiting and diarrhoea

11.4. Delayed And Immediate Effects and Also Chronic Effects From Short And Long Term Exposure

Target Organs	Skin, Eyes, Gastrointestinal tract & Respiratory system
Sensitization	Showers Eyewash stations Ventilation systems
Chronic Effects	Prolonged or repeated contact may dry skin and cause irritation
Mutagenic Effects	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
Aspiration Hazard	No Information Available

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity The environmental impact of this product has not been fully investigated

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Zinc Bromide 7699-45-8	NA	NA	NA	NA

12.2. Persistence and Degradability No Information Available

12.3. Bioaccumulation No Information Available

SAFETY DATA SHEET**12.4. Other Adverse Effects**

No information Available

13. DISPOSAL CONSIDERATIONS

Wast Disposal Methods	According to federal laws, this substance as given does not constitute a hazardous waste (40 CFR 261). If chemical additions are made to this substance, if it is mixed with or otherwise comes into contact with a hazardous waste, or if the transformed material is a hazardous waste, then this material may turn into a hazardous waste. For additional requirements, refer to the relevant state, regional, or local regulations.
Contaminated Packaging	Do not re-use empty containers

14. TRANSPORT INFORMATION**14.1. US Department of Transportation (DOT)**

Proper shipping Name: UN3082, Environmentally Hazardous substance, Liquid, N. O. S. (Zinc Bromide), 9, PGIII.

SEA:

IMO Class: 9

UN Number: UN 3082

Packing Group: III

IMO Labelling: 9 + Marine Pollutant

Label code:



Proper shipping name: Environmentally hazardous substance liquid, N.O.S. (Contains: Zinc Bromide)

EMS: F-A, S-F

Marpol – Annex II: Not determined

Marpol – Annex III: Not determined

Transportation description: UN 3082 Environmentally hazardous substance liquid, N.O.S. (Contains: Zinc Bromide)

SAFETY DATA SHEET

ROAD:

ARD/RID: 9

Packing Group: III

UN Number: 3082

ARD/RID labelling: 9

TREMCARD:CEFIC: 90GM6-III

Proper shipping name: UN 3082 Environmentally hazardous substance liquid, N.O.S. (Contains: Zinc Bromide)

Uncleaned empty packaging/ transport equipment:

ROAD (ADR/RID): Empty packaging, tank-trailer, tank-container, portable tank, etc. uncleaned of residue: UN 3082 Environmentally hazardous substance liquid, N.O.S. (Contains: Zinc Bromide)

SEA (IMO/IMDG): Empty packaging, tank-trailer, tank-container, portable tank, etc. uncleaned of residue: UN 3082 Environmentally hazardous substance liquid, N.O.S. (Contains: Zinc Bromide), 9, III, Marine Pollutant

15. REGULATORY INFORMATION

Chemical Inventories:

US (TSCA): The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL): The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations: This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 the NSN Regulations under CEPA, 1999.

SARA Title III Component:

	Sec. 302 (EHS) TPQ (lbs)	Sec. 304 EHS RQ (lbs)	CERCLA RQ (lbs)	Sec. 313	RCRA CODE	CAA 112 9r) TQ (lbs)
Zinc Bromide	Not Listed	Not listed	1000	313C	Not listed	Not listed

SAFETY DATA SHEET**16. OTHER INFORMATION**

Prepare By	INTECH Organics Limited - info@intech.in
Issue Date	14-Nov-2024
Revision Date	04-Dec-2024
Revision Note	

16.1. General Disclaimer:

To the best of our knowledge, information, and belief on the date of publishing, the data on this SDS is accurate. The provided information should not be construed as a guarantee or a quality specification; rather, it is intended simply as a reference for safe handling, use, processing, storage, transit, disposal, and release. Unless otherwise indicated in the text, the information is limited to the substance designated and may not apply to that material when used alone, in conjunction with other materials, or in any procedure.

END OF SAFETY DATA SHEET