SAFETY DATA SHEET

30-Jan-2020

1. IDENTIFICATION

Product identifier

Product Name

Spa Brominating Concentrate

Other means of identification

Product Code UN/ID no.

14224NCM

UN1759

Recommended use of the chemical and restrictions on use

Recommended Use

Spa Sanitizer.

Uses advised against

Do not mix with other chemicals

Details of the supplier of the safety data sheet

Supplier Address

Bio-Lab, Inc. P.O. Box 300002

Lawrenceville, GA 30049-1002 Telephone 800-859-7946

Emergency telephone number

Emergency Telephone

Chemtrec (Transportation) 1-800-424-9300, 703-527-3887

Poison Control Center (Medical): (877) 800-5553

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 5
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3

Label elements

Emergency Overview

Danger Warning

Hazard statements

Harmful if swallowed Mav be harmful in contact wi

May be harmful in contact with skin Causes severe skin burns and eye damage

May cause respiratory irritation

May form combustible dust concentrations in air



Color white

Physical state Solid

Odor Bromine

** Product as sold is not expected to produce respiratory effects. See Section 11 (Toxicological Information) for additional details on inhalation.

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

IF ON SKIN (or hair); Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Substance

Not applicable

Mixture

Chemical Name	CAS No.	Weight-%
Sodium Dichloro-S-Triazinetrione	2893-78-9	82.5
sodium bromide	7647-15-6	14.7

4. FIRST AID MEASURES

Description of first aid measures

General advice

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms

persist, call a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Immediate medical attention is not

required.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. If

symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Have

person sip a glass of water if able to swallow. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

lavage.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Flood fire area with water from a distance.

Unsuitable extinguishing media Do not use dry chemicals, carbon dioxide, or halogenated extinguishing agents.

Specific hazards arising from the chemical

Do not let the fire burn. Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Wet material may generate nitrogen trichloride, an explosion hazard.

Hazardous combustion products Chlorine gas. Bromine gas. Nitrogen trichloride. Nitrogen. Phosgene. Cyanogen chloride.

Carbon oxides.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

In the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Evacuate personnel to safe areas. Keep

people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into

surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Do not add water to spilled material. Methods for containment

Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry containers for disposal. Do not close containers containing wet or damp material. They should be left open to disperse any

hazardous gases that may form.

Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp Methods for cleaning up

to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Do not use floor sweeping compounds to clean up spills. Do not transport wet or damp material. Contact supplier in Section 1 for instructions, especially for damp or contaminated material.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Advice on safe handling

Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. Do not mix with other chemicals. Keep/Store away from clothing/ combustible materials. Use

only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of Storage Conditions

children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly

labeled containers.

Incompatible with strong acids and bases. Ammonia. Calcium hypochlorite. Do not mix with Incompatible materials

other swimming pool/spa chemicals in their concentrated forms. Reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational **Exposure Guidelines**

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Controls

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Eye/face protection

Wear protective gloves and protective clothing. Skin and body protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved Respiratory protection

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular General Hygiene Considerations

cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Appearance Color

Solid

granules white

Odor

g/cm3

Remarks • Method

Decomposes on heating

in 1% Solution

Odor threshold

Bromine

No information available

Property

рΗ Melting point / freezing point Boiling point / boiling range

Flash point **Evaporation rate**

Flammability (solid, gas) Flammability Limit in Air

Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density

Specific Gravity Water solubility Solubility in other solvents Partition coefficient

Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Density

Bulk density

Explosive properties Oxidizing properties

Values

4.5 240 °C / 464 °F

No information available No information available No information available No information available

No information available No information available No information available No information available

No information available Soluble in water

No information available No information available

0.90-0.96 No information available

No information available

This product is not classified as an oxidizer under GHS.

Other Information

Softening point Molecular weight VOC Content (%)

No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight. Protect from moisture. Do not mix with other chemicals.

Incompatible materials

Incompatible with strong acids and bases. Ammonia. Calcium hypochlorite. Do not mix with other swimming pool/spa chemicals in their concentrated forms. Reducing agents.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Chlorine gas. Bromine gas. Nitrogen trichloride. Nitrogen. Cyanogen chloride. Carbon oxides. Phosgene.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

This material in the form as sold is not expected to produce respiratory effects. Particles of respirable size are generally not encountered. The respirable fraction is typically less than 0.1% by weight. If ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. Exposure to the solid product or to free chlorine evolving from the product may cause irritation, redness of upper and lower airways, coughing, laryngospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.

Eye contact

Severely irritating to eyes. Risk of serious damage to eyes. Causes burns.

Skin contact

Irritating to skin. Contact with moist skin may cause skin burns. Causes burns.

Ingestion

Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Dichloro-S-Triazinetrione 2893-78-9	= 1823 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	0.27 - 1.17 mg/L (Rat, dust) 4 h
sodium bromide 7647-15-6	= 3500 mg/kg(Rat)	> 2000 mg/kg (Rabbit)	-

Information on toxicological effects

Symptoms

No information available.

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

Sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive toxicity STOT - single exposure

No information available.

STOT - repeated exposure

No information available. No information available.

Chronic toxicity
Aspiration hazard

Avoid repeated exposure. No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document . mg/kg mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aguatic plants	Fish	Crustacea
Sodium Dichloro-S-Triazinetrione	_	0.207 - 0.389: 96 h Lepomis	0.00018 - 0.00021: 48 h Daphnia
2893-78-9		macrochirus mg/L LC50	magna mg/L EC50 0.093 - 0.16: 48
		flow-through 0.29: 96 h	h Daphnia magna mg/L EC50
		Oncorhynchus mykiss mg/L LC50	
		0.176 - 0.267: 96 h Oncorhynchus	
		mykiss mg/L LC50 flow-through	
		0.13 - 0.36: 96 h Oncorhynchus	
		mykiss mg/L LC50 static 0.25 - 1:	
		96 h Lepomis macrochirus mg/L	
		LC50 static	
sodium bromide	5800 - 24000: 96 h Scenedesmus	24000 - 96000: 96 h Oryzias latipes	5700 - 10800: 48 h Daphnia magna
7647-15-6	pannonicus mg/L EC50	mg/L LC50 flow-through 24000: 96	mg/L EC50 Static 5800 - 48000: 48

h Oryzias latipes mg/L LC50
semi-static 0.054 - 0.081: 96 h
Oncorhynchus mykiss mg/L LC50
flow-through 16000 - 24000: 96 h
Poecilia reticulata mg/L LC50
flow-through 1000: 96 h
Oncorhynchus mykiss mg/L LC50
static 16000: 96 h Poecilia reticulata
mg/L LC50 semi-static 15614 17428: 96 h Pimephales promelas
mg/L LC50 static 1000: 96 h
Lepomis macrochirus mg/L LC50
static

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container. Refer to all federal, state and local regulations prior to disposal of

container and unused contents by reuse, recycle or disposal.

14. TRANSPORT INFORMATION

Note: Limited quantity (LQ) exception is possible.

DOT

UN/ID no. UN1759

Proper shipping name Corrosive solids, n.o.s. (Sodium dichloro-s-triazinetrione)

Hazard Class 8
Packing Group

Emergency Response Guide 154

Number

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TDG

UN/ID no. UN1759

Proper shipping name Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetrione)

Hazard Class 8
Packing Group

IATA

UN/ID no. UN1759

Proper shipping name Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetrione)

Hazard Class 8
Packing Group III

IMDG

UN/ID no.

UN1759

Proper shipping name

Corrosive solid, n.o.s. (Sodium dichloro-s-triazinetrione)

Hazard Class

8

Packing Group EmS-No.

III

Marine pollutant

F-A, S-B

This material meets the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA DSL/NDSL Complies Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

US Federal Regulations

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 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (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

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium Dichloro-S-Triazinetrione	X	X	X
2893-78-9			

U.S. EPA Label Information

EPA Pesticide Registration Number 5185-376

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the

pesticide label:

Difference between SDS and EPA Pesticide label

DANGER: Corrosive: Causes irreversible eye damage. Causes skin burns. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing dust. Wear protective eyewear (safety glasses). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA

Health hazards 3

Flammability 0

Instability 1

Physical and Chemical

Properties -

HMIS

Health hazards 3

Flammability 0

Physical hazards 1

Personal protection X

Prepared By Revision Date

Regulatory Affairs

30-Jan-2020

Revision Note

No information available

Disclaimer

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet