Safety Data Sheet: MB-60B, CM

Supercedes Date 07/20/2010 **Issuing Date** 12/18/2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name MB-60B, CM
Recommended use Biocidal product
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 4615
Chemical nature solid
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color White **Physical State** Solid **Odor** Slight chlorine

GHS
Classification
Physical Hazards
None
Health Hazard

Acute Oral Toxicity	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4

Other hazards
None

Labeling
Signal Word
DANGER

Hazard Statements
H331 - Toxic if inhaled
H302 - Harmful if swallowed

Precautionary Statements
P280 - Wear protective gloves, protective clothing and eye protection.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P261 - Avoid breathing dust
P271 - Use in a well-ventilated area.
P270 - Do not eat, drink or smoke when using this product
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 - Call a physician if unwell.
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
P501 - Dispose of contents and container in accordance with applicable regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Sodium dichloro-S-triazinetrione	2893-78-9	60-100
Sodium bromide	7647-15-6	5-10
Sodium chloride	7647-14-5	1-5

4. FIRST AID MEASURES

General advice Do not get in eyes, on skin or on clothing. Do not breathe dust or fume.
Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Call a physician or poison control center immediately.
Skin Contact Take off all contaminated clothing immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Inhalation Move to fresh air. If breathing has stopped, apply artificial respiration. Call a physician or poison

control center immediately.

Ingestion Call a physician or poison control center immediately. Give small amounts of water to drink. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Rinse mouth.

Notes to physician The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed.

5. FIRE-FIGHTING MEASURES

Flash Point Does not flash **Method** Not applicable

Flammability Limits in Air % Not applicable. **Upper** No data available **Lower** No data available

Suitable Extinguishing Media

Water spray.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors.

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

NFPA **Health** 3 **Flammability** 0 **Instability** 2

HMIS **Health** 3 **Flammability** 0 **Instability** 2

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so.

Environmental Precautions Do not flush into surface water or sanitary sewer system.

Methods for Containment Pick up and arrange disposal without creating dust.

Methods for Cleaning Up Use clean non-sparking tools to collect material and place it into loosely covered plastic containers for later disposal.

Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Do not get in eyes, on skin or on clothing. Do not breathe vapors/dust.

Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture.

Storage Temperature **Minimum** 32 °F / 0 °C **Maximum** 125 °F / 52 °C

Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Sodium dichloro-S-triazinetrione	No data available	No data available	No data available
Sodium bromide	No data available	No data available	No data available
Sodium chloride	No data available	5 mg/m^3 PNOR (as solid)	No data available

Engineering Measures Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin Protection Wear suitable protective clothing, Impervious gloves.

Respiratory Protection Respirator must be worn if exposed to dust.

General Hygiene Considerations Wear protective gloves/clothing. Ensure that eyewash stations and safety showers are close to the workstation location. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid	**Viscosity**	Granular
Color	White	**Odor**	Slight chlorine
Odor Threshold	Not applicable	**Appearance**	Opaque
pH	6.5 (as 1% solution)	**Specific Gravity**	1.01
Evaporation Rate	Not applicable	**Percent Volatile (Volume)**	0
VOC Content (%)	0	**VOC Content (g/L)**	0
Vapor Pressure	0 mmHg @ 70°F	**Vapor Density**	No information available
Solubility	Completely soluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	Not applicable	**Flammability (solid, gas)**	No data available

Flash Point Does not flash **Method** Not applicable
Autoignition Temperature No information available.
Flammability Limits in Air % Not applicable. **Upper** No data available **Lower** No data available

10. STABILITY AND REACTIVITY

Chemical Stability Stable. Hazardous polymerization does not occur.
Conditions to Avoid Keep away from open flames, hot surfaces, and sources of ignition, Protect from moisture.
Incompatible Products Strong oxidizing agents, Reducing agents, Acids, Bases, Ammonia, Calcium hypochlorite.
Hazardous Decomposition Products Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas, Chlorine, Hydrogen bromide, Bromine, Phosgene, Sodium oxides.
Possibility of Hazardous Reactions None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):
Oral LD50 710
Dermal LD50 >2000
Inhalation LC50
Gas No information available
Mist 0.60
Vapor No information available

Principle Route of Exposure Skin contact, Eye contact, Inhalation.
Primary Routes of Entry Inhalation, Ingestion.
Acute Effects
Eyes Corrosive to the eyes and may cause severe damage including blindness.
Skin Causes skin burns.
Inhalation Harmful by inhalation. Causes burns.
Ingestion If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. May cause central nervous system effects such as headache, dizziness, weakness, staggering gait, nausea, blurred vision, excitation, and in extreme cases, coma or death.
Chronic Toxicity Inhaled corrosive substances can lead to a toxic edema of the lungs. Liver and kidney injuries may occur.
Target Organ Effects Central nervous system, Liver, Kidney, Bladder, Cardiovascular system.
Aggravated Medical Conditions Respiratory disorders, Skin disorders, Kidney disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Sodium dichloro-S-triazinetrione	= 735 mg/kg (Rat)	> 5000 mg/kg (Rat) > 2000 mg/kg (Rabbit)	> 50 mg/L (Rat) 1 h	no data available	no data available
Sodium bromide	= 3400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	no data available	no data available	no data available
Sodium chloride	= 3 g/kg (Rat)	no data available	> 42 g/m^3 (Rat) 1 h	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium dichloro-S-triazinetrione	no data available	no data available	no data available	no data available	liver, kidney, bladder
Sodium bromide	no data available	no data available	no data available	no data available	CNS, kidney, cardiovascular system
Sodium chloride	no data available	no data available	no data available	no data available	kidney

Carcinogenicity There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium dichloro-S-triazinetrione	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium bromide	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium chloride	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow

Sodium dichloro-S-triazinetrione	no data available	LC50 0.25 - 1 mg/L Lepomis macrochirus 96 h LC50 0.207 - 0.389 mg/L Lepomis macrochirus 96 h LC50 0.176 - 0.267 mg/L Oncorhynchus mykiss 96 h LC50 = 0.29 mg/L Oncorhynchus mykiss 96 h LC50 0.13 - 0.36 mg/L Oncorhynchus mykiss 96 h	no data available	EC50 0.00018 - 0.00021 mg/L 48 h EC50 0.093 - 0.16 mg/L 48 h	N/A
Sodium bromide	EC50 5800 - 24000 mg/L Scenedesmus pannonicus 96 h	LC50 24000 - 96000 mg/L Oryzias latipes 96 h LC50 = 24000 mg/L Oryzias latipes 96 h LC50 16000 - 24000 mg/L Poecilia reticulata 96 h LC50 = 16000 mg/L Poecilia reticulata 96 h LC50 15614 - 17428 mg/L Pimephales promelas 96 h LC50 > 1000 mg/L Lepomis macrochirus 96 h LC50 0.054 - 0.081 mg/L Oncorhynchus mykiss 96 h LC50 > 1000 mg/L Oncorhynchus mykiss 96 h	no data available	EC50 5800 - 48000 mg/L 48 h EC50 5700 - 10800 mg/L 48 h	N/A
Sodium chloride	no data available	LC50 5560 - 6080 mg/L Lepomis macrochirus 96 h LC50 = 12946 mg/L Lepomis macrochirus 96 h LC50 6020 - 7070 mg/L Pimephales promelas 96 h LC50 = 7050 mg/L Pimephales promelas 96 h LC50 6420 - 6700 mg/L Pimephales promelas 96 h LC50 4747 - 7824 mg/L Oncorhynchus mykiss 96 h	no data available	EC50= 1000 mg/L 48 h EC50 340.7 - 469.2 mg/L 48 h	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Dichloroisocyanuric acid salts, mixture
Hazard Class 5.1
UN-No UN2465
Packing Group II
Description UN2465, Dichloroisocyanuric acid salts, mixture, 5.1, PG II

TDG

Hazard Class 5.1
UN-No UN2465
Packing Group II

ICAO

UN-No UN2465
Proper Shipping Name Dichloroisocyanuric acid salts, mixture
Hazard Class 5.1
Packing Group II
Shipping Description UN2465, Dichloroisocyanuric acid salts,mixture,5.1,PG II

IATA

UN-No UN2465

Proper Shipping Name	Dichloroisocyanuric acid salts, mixture
Hazard Class	5.1
Packing Group	II
ERG Code	5L
Shipping Description	UN2465,Dichloroisocyanuric acid salts, mixture,5.1,PG II

IMDG/IMO

Proper Shipping Name	Dichloroisocyanuric acid salts, mixture
Hazard Class	5.1
UN-No	UN2465
Packing Group	II
EmS No.	F-A, S-Q
Shipping Description	UN2465, Dichloroisocyanuric acid salts, mixture,5.1,PG II

15. REGULATORY INFORMATION

Inventories

TSCA	Complies
DSL	Complies

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 contain any chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

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

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Sodium dichloro-S-triazinetrione	Not applicable	Not applicable
Sodium bromide	Not applicable	Not applicable
Sodium chloride	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By	Rachael Mohochi
Supercedes Date	07/20/2010
Issuing Date	12/18/2013
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

CHEM-AQUA, INCassumes no responsibility for personal injury or property damage caused by the use, storage, or disposal of the product in a manner not recommended on the product label. Users assume all risks associated with such unrecommended use, storage or disposal of the product. The information provided on this document 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.