SAFETY DATA SHEET MB38

Supercedes Date: 11/07/2023 **Issuing Date:** 04/01/2025

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MB38
Recommended use Biocidal product
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code: C517
Chemical nature Alkaline Aqueous solution
Emergency Telephone
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Clear Yellow **Physical state** Liquid **Odor** Chlorine
Appearance Transparent

GHS Classification

Physical Hazards

Substances/mixtures corrosive to metal	Category 1

Health Hazard

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Hazards not otherwise classified (HNOC)
Not applicable

Labeling
Signal word
Danger



Hazard statements
Causes severe skin burns and eye damage.
May be corrosive to metals

Precautionary statements
Wear protective gloves, protective clothing, eye protection and face protection.
Wash face, hands and any exposed skin thoroughly after handling.
Do not breathe mist.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Call a physician if unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call a physician.
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.
Absorb spillage to prevent material damage
Store in a corrosion-resistant container..
Dispose of contents and container in accordance with applicable regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Sodium hypochlorite	7681-52-9	10-30
Sodium hydroxide	1310-73-2	1-5

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

4. FIRST AID MEASURES

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical attention.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical attention.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE-FIGHTING MEASURES

Flash Point Does not flash **Method** No data available

Flammability Limits in Air %: Hydrogen, by reaction with metals. **Upper flammability limit:** 75 **Lower flammability limit:** 4

Suitable Extinguishing Media

Water spray. Foam. Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Contact with metals may evolve flammable hydrogen gas. Material can create slippery conditions.

Protective Equipment and Precautions for Firefighters

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

NFPA	**Health hazards** 3	**Flammability** 0	**Stability** 1
HMIS	**Health hazards** 3	**Flammability** 0	**Physical Hazard** 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.

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

Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

Methods for Cleaning Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Neutralizing Agent Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling Do not get in eyes, on skin or on clothing. Do not breathe mist.

Storage Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Metal containers must be lined.

Storage Temperature	**Minimum**	35 °F / 2 °C		**Maximum**	70 °F / 21 °C		
Storage Conditions	**Indoor**	X	**Outdoor**	**Heated**		**Refrigerated**	

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical name	CAL/OSHA PEL	ACGIH TLV	OSHA PEL	NIOSH
Sodium hydroxide	No data available	Ceiling: 2 mg/m^3	TWA: 2 mg/m^3	10 mg/m^3 Ceiling: 2 mg/m^3

Engineering Measures Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Personal Protective Equipment

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

Skin Protection Wear suitable protective clothing, Impervious gloves.

Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	**Kinematic viscosity**	No data available
Color	Clear Yellow	**Odor**	Chlorine
Odor threshold	Not applicable	**Appearance**	Transparent
pH	12	**Specific Gravity**	1.7
Evaporation Rate	No data available	**Percent Volatile (Volume)**	0
VOC content	0	**VOC Content (g/L)**	0
Product VP (mmHg @ 70°F)	No data available	**Relative vapor density**	No data available
Solubility(ies)	Soluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition temperature**	No data available
Initial boiling point and boiling range	> 230 °F / > 110 °C	**Flammability (solid, gas)**	No data available
Flash Point	Does not flash	**Method**	No data available
Autoignition Temperature	No information available		
Flammability Limits in Air %:	Hydrogen, by reaction with metals	**Upper flammability limit:** 75 **Lower flammability limit:** 4	

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. Extremes of temperature and direct sunlight.
Incompatible Products Reducing agents, Acids, Metals, Amines, Ammonia, Ammonium salts, Alcohols, Cyanides, Flammable materials, Combustible material.
Decomposition temperature No data available
Hazardous decomposition products Hydrogen chloride gas, Sodium oxides, Phosgene, Contact with metals liberates hydrogen gas.
Possibility of Hazardous Reactions None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information No information available

The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) No information available
ATEmix (dermal) No information available
Inhalation LC50
ATEmix (inhalation-gas) No information available
ATEmix (inhalation-dust/mist) No information available
ATEmix (inhalation-vapor) No information available

Principle Route of Exposure Skin contact, Eye contact, Inhalation.
Primary Routes of Entry None known.
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.
Chronic toxicity Inhaled corrosive substances can lead to a toxic edema of the lungs.
Target organ effects Respiratory system, Eyes, Skin.
Aggravated Medical Conditions Skin disorders, Respiratory disorders.

Component Information

Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Others
Sodium hypochlorite 7681-52-9	= 8.91 g/kg (rat)	> 20000 mg/kg (rabbit)	> 10.5 mg/L (rat) 1 h	No data available	No data available
Sodium hydroxide 1310-73-2	No data available	1350 mg/kg (Rabbit)	No information available	No data available	No data available

Chronic Toxicity None known

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA	Other
Sodium hypochlorite 7681-52-9	-	Group 3	-	-	Not applicable

12. ECOLOGICAL INFORMATION

Product Information

Toxicity to algae	Toxicity to fish	Microtox	Partition coefficient
No data available	LC50 (Pimephales promelas, 48 hr): 6.48 mg/L mg/l	No data available	-

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

Additional Ecological Information: Toxicity data will be furnished on request.

Component Information

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to microorganisms	Crustacea	Partition coefficient
Sodium hypochlorite	CE50 (Skeletonema costatum, 24h) = 0.095 mg/L	CL50 (Lepomis macrochirus, 96h): 0.39 mg/L	No information available	CE50 (Dapnhia magna, 48h): 0.033 - 0.055 mg/L	-

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

13. DISPOSAL CONSIDERATIONS

Product Disposal Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your state pesticide or environmental control agency.

Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Proper shipping name HYPOCHLORITE SOLUTIONS
Transport hazard class(es) 8
UN number or ID number UN1791
Packing group III
Reportable Quantity (RQ) SODIUM HYPOCHLORITE, RQ kg = 363.20
Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to DOT.
Description UN1791, HYPOCHLORITE SOLUTIONS, 8, PG III

TDG

UN proper shipping name HYPOCHLORITE SOLUTIONS
Transport hazard class(es) 8
UN number or ID number UN1791
Packing group III
Description HYPOCHLORITE SOLUTION,8,UN1791,PG III

ICAO (air)

UN number or ID number UN1791
UN proper shipping name HYPOCHLORITE SOLUTIONS
Transport hazard class(es) 8
Packing group III
Description UN1791, HYPOCHLORITE SOLUTIONS,8,PG III

IATA

UN number or ID number UN1791
UN proper shipping name HYPOCHLORITE SOLUTIONS
Transport hazard class(es) 8
Packing group III
ERG-Code 8L
Description UN1791,HYPOCHLORITE SOLUTIONS,8,PG III

IMDG

UN proper shipping name HYPOCHLORITE SOLUTION
Transport hazard class(es) 8
UN number or ID number UN1791
Packing group III
EmS-No F-A, S-B
Marine Pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
Description UN1791, HYPOCHLORITE SOLUTION,8,PG III

15. REGULATORY INFORMATION

Inventories

TSCA	Listed
DSL/NDSL	Listed

US Federal Regulations

FIFRA

This chemical is a pesticide product registered by the US EPA and is subject to certain labeling requirements under federal pesticide laws. These requirements differ from the classification criteria and hazard information required for SDSs, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

DANGER
Corrosive
May cause severe skin and eye irritation or chemical burns to broken skin.
Causes eye damage

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

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Sodium hypochlorite	100 lb	-
Sodium hydroxide	1000 lb	-

16. OTHER INFORMATION

Prepared By	Hazard Communication Department
Supercedes Date:	11/07/2023
Issuing Date:	04/01/2025
Revision Note	No information available
Glossary	No information available
List of References.	No information available

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