

CHEMAQUA
BOX 152170
IRVING, TEXAS
75015

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O.S.H.A. MSDS ENCLOSED
RETENTION REQUIRED BY LAW

IMPORTANT DOCUMENT ENCLOSED
O.S.H.A. INFORMATION

Customer Number : 462265
Bill of Lading Number: USA259
Order Number : 6145227

SAFETY DATA SHEET MB-38

Supersedes Date: 10/23/2019

Issuing Date: 11/07/2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: MB-38
Recommended use Biocidal product
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code: 10070694
Chemical nature Alkaline Aqueous solution
Emergency Telephone
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Pale yellow - Green
Appearance Transparent

Physical state Liquid

Odor Chlorine

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

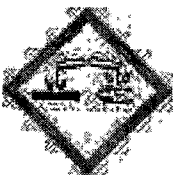
Hazards not otherwise classified (HNOC)

Not applied

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. If skin irritation or rash occurs, get medical attention. Wash contaminated clothing before reuse.

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

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-%
Water, distilled, conductivity or of similar purity	7732-18-5	80-100
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 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	Pale yellow - Green	Odor	Chlorine
Odor threshold	Not applicable	Appearance	Transparent
pH	12	Specific Gravity	1.224
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	Data lacking
Solubility(ies)	Soluble	n-Octanol/Water Partition	No data available
Melting Point/Range	No data available	Decomposition temperature	No data available
Boiling Point/Range	> 104 °F / > 40 °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 metal s 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
Water, distilled, conductivity or of similar purity 7732-18-5	> 90 mL/kg (Rat)	No information available	No information available	No data available	No data available
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	325 mg/kg (rat)	= 1350 mg/kg (rabbit)	No information available	No data available	No data available

Chronic Toxicity

Chemical name	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium hydroxide 1310-73-2	No data available	No data available	No data available	No data available	Skin Eyes Respiratory system

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**

<u>Toxicity to algae</u>	<u>Toxicity to fish</u>	<u>Microtox</u>	<u>Crustacea</u>	<u>Partition coefficient</u>
No data available	LC50 (Pimephales promelas, 48 hr): 6.48 mg/L	No data available	LC50 (Ceriodaphnia dubia, 48 h): 0.10 mg/L	-

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 (Daphnia magna, 48h): 0.033 - 0.055 mg/L	-
Sodium hydroxide	No information available	CL50 (Oncorhynchus mykiss, 96h) = 45.4 mg/L	No information available	No information available	-

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/NDL 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:

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 Adrienne McKee
Supersedes Date: 10/23/2019
Issuing Date: 11/07/2023
Revision Note No information available
Glossary No information available
List of References. No information available

CHEM-AQUA, INC assumes 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.

SAFETY DATA SHEET CHEM-AQUA 40215

Supersedes Date: 10/25/2021

Issuing Date: 10/23/2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CHEM-AQUA 40215
Recommended use Biocidal product
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code: 12054757
Chemical nature Aqueous solution
Emergency Telephone
CHEMTREC® 800-424-9300
Telephone Inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless - Yellow
Appearance Transparent

Physical state Liquid

Odor Pungent

GHS

Classification

Physical Hazards

Corrosive to metals

Category 1

Health Hazard

Skin corrosion/irritation

Category 1

Serious eye damage/eye irritation

Category 1

Skin sensitization

Category 1

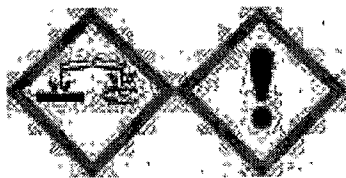
Hazards not otherwise classified (HNOC)

Not applied

Labeling

Signal word

Danger



Hazard statements

Causes severe skin burns and eye damage

May cause an allergic skin reaction

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

Contaminated work clothing should not be allowed out of the workplace

Do not breathe mist

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation or rash occurs, get medical attention. Wash contaminated clothing before reuse.

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-%
Magnesium nitrate	10377-60-3	1-5
5-Chloro-2-methyl-4-isothiazolin-3-one	26172-55-4	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. May cause an allergic skin reaction.
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 vomiting. Get immediate medical attention.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. 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. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in breathing.

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. May cause sensitization in susceptible persons. Treat symptomatically.

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		
Foam. Alcohol-resistant foam. Carbon dioxide (CO ₂). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Specific hazards arising from the chemical		
Thermal decomposition can lead to release of irritating gases and vapors. Contact with metals liberates 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
HMIS	Health hazards 3	Flammability 0
		Stability 0
		Physical Hazard 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Ensure adequate ventilation. 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	Pick up and transfer to properly labeled containers.
Neutralizing Agent	Neutralize with lime milk or soda and flush with plenty of water.

7. HANDLING AND STORAGE

Handling	Do not get in eyes, on skin or on clothing. Do not breathe mist.
Storage	Keep out of the reach of children. Store in original container. Metal containers must be lined. Keep containers tightly closed in a dry, cool and well-ventilated place. Freezing will affect the physical

	condition but will not damage the material. Thaw and mix before using.			
Storage Temperature	Minimum	34 °F / 1 °C	Maximum	131 °F / 55 °C
Storage Conditions	Indoor	X	Outdoor	Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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.
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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Kinematic viscosity	No data available
Color	Colorless - Yellow	Odor	Pungent
Odor threshold	Not applicable	Appearance	Transparent
pH	2	Specific Gravity	1.02
Evaporation Rate	No data available	Percent Volatile (Volume)	No data available
VOC content	0	VOC Photoreactive (Y/N)	No
VOC Content (g/L)	0	Product VP (mmHg @ 70°F)	No data available
Relative vapor density	No information available	Solubility(ies)	Completely soluble
n-Octanol/Water Partition	No data available	Melting Point/Range	No data available
Decomposition temperature	No data available	Boiling Point/Range	212 °F / 100 °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	None known.
Incompatible Products	Strong oxidizing agents, Reducing agents, Amines, Powdered metals, Light and/or alkaline metals, Contact with metals liberates hydrogen gas.
Decomposition temperature	No data available
Hazardous decomposition products	Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chlor ide chloride 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	Skin Absorption.
Acute Effects:	
Eyes	Corrosive to the eyes and may cause severe damage including blindness.
Skin	Causes skin burns. May cause allergic skin reaction.
Inhalation	Harmful by inhalation. Causes burns. Risk of serious damage to the lungs (by inhalation).
Ingestion	If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Components of the product create formation of methemoglobin.
Chronic toxicity	May cause sensitization by skin contact. Inhaled corrosive substances can lead to a toxic edema of the lungs.
Target organ effects	Immune system.

Aggravated Medical Conditions Skin disorders, Respiratory disorders.

Component Information

Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Others
Magnesium nitrate 10377-60-3	= 5440 mg/kg (Rat)	>5000 mg/kg (rat)	No information available	No data available	No data available
5-Chloro-2-methyl-4-isothiazolin-3-one 26172-55-4	= 481 mg/kg (Rat)	>1008 mg/kg (Rat)	= 1.23 mg/L (Rat) 4 h	No data available	No data available
2-Methyl-4-isothiazolin-3-one 2682-20-4	183 mg/kg (Rat)	= 200 mg/kg (Rabbit) = 87.12 mg/kg (Rabbit)	= 0.11 mg/L (Rat) 4 h	No data available	No data available

Chronic Toxicity

Chemical name	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
5-Chloro-2-methyl-4-isothiazolin-3-one 26172-55-4	No data available	Skin sensitization	No data available	No data available	No data available
2-Methyl-4-isothiazolin-3-one 2682-20-4	No data available	Skin sensitization	No data available	No data available	No data available

Carcinogenicity There are no known carcinogens in this product.

12. ECOLOGICAL INFORMATION

Product Information

Toxicity to algae	Toxicity to fish	Microtox	Crustacea	Partition coefficient
No data available	LC50 = 7.21 mg/L Pimephales promelas (fathead minnow) 48 hr	No data available	LD50 (Ceriodaphnia dubia, 48 h): 2.30 mg/L	-

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
5-Chloro-2-methyl-4-isothiazolin-3-one	EC50 0.03 - 0.13 mg/L Pseudokirchneriella subcapitata 96 h EC50 0.11 - 0.16 mg/L Pseudokirchneriella subcapitata 72 h	LC50 = 1.6 mg/L Oncorhynchus mykiss 96 h	EC50 = 5.7 mg/L 16 h	0.12 - 0.3: 48 h Daphnia magna mg/L EC50 Flow through 0.71 - 0.99: 48 h Daphnia magna mg/L EC50 Static 4.71: 48 h Daphnia magna mg/L EC50	0.75

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. Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT

Proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Transport hazard class(es) 8
UN number or ID number UN3265

Packing group II
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.,(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE),8,PG II

TDG

UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Transport hazard class(es) 8
UN number or ID number UN3265
Packing group II
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.,(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE),8,PG II

ICAO (air)

UN number or ID number UN3265
UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Transport hazard class(es) 8
Packing group II
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.,(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE),8,PG II

IATA

UN number or ID number UN3265
UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Transport hazard class(es) 8
Packing group II
ERG-Code 8L
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.,(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE),8,PG II

IMDG

UN proper shipping name CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Transport hazard class(es) 8
UN number or ID number UN3265
Packing group II
EmS-No F-A, S-B
Description UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.,(5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE),8,PG II

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 - causes irreversible eye damage
 Causes skin burns
 May be fatal if absorbed through skin
 Harmful if swallowed

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Magnesium nitrate	10377-60-3	1-5	1.0

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, 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

16. OTHER INFORMATION

Prepared By	Adrienne McKee
Supersedes Date:	10/25/2021
Issuing Date:	10/23/2023
Revision Note	No information available
Glossary	No information available
List of References.	No information available

CHEM-AQUA, INC assumes 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.

Safety Data Sheet: CHEM-AQUA 31865

Supersedes Date: 01/06/2020

Issuing Date: 09/28/2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CHEM-AQUA 31865
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code: 12065536
Chemical nature Aqueous solution of alkali salts
Emergency Telephone
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Amber to Greenish yellow

Physical state Liquid

Odor Sweet

GHS

Classification

Physical Hazards

Corrosive to Metals

Category 1

Health Hazard

Skin Corrosion/Irritation

Category 1

Serious Eye Damage/Eye Irritation

Category 1

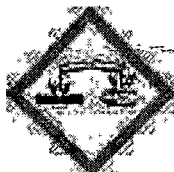
Other hazards

None

Labeling

Signal Word

DANGER



Hazard statements

H314 - Causes severe skin burns and eye damage

H290 - May be corrosive to metals

Precautionary Statements

P280 - Wear protective gloves, protective clothing, eye protection and face protection.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P260 - Do not breathe mist or spray.

P270 - Do not eat, drink or smoke when using this product

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P332 + P313 - If skin irritation occurs, get medical attention.

P363 - Wash contaminated clothing before reuse

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a physician.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P342 + P311 - If experiencing respiratory symptoms, call a physician.

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.

P390 - Absorb spillage to prevent damage.

P406 - Store in corrosion resistant container with a resistant inner liner

P501 - Dispose of contents and container in accordance with applicable regulations

3 % of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Sodium hydroxide	1310-73-2	3-7
Sodium zincate	12179-14-5	1-5
Sodium tolyltriazole	64665-57-2	1-5

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

4. FIRST AID MEASURES

General advice	Do not get in eyes, on skin or on clothing. Do not breathe mist or spray.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.
Skin Contact	Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
Inhalation	Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.
Ingestion	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
Notes to physician	Treat symptomatically. 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	No data available
Flammability Limits in Air %:	Hydrogen, by reaction with metals.	Upper:	75
		Lower:	4
Suitable Extinguishing Media			
Carbon dioxide (CO ₂). Dry chemical. Water spray. Foam. 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 3	Flammability	0
HMIS	Health 3	Flammability	0
		Instability	0
		Physical Hazard	0

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	Pick up and transfer to properly labeled containers.
Neutralizing Agent	Acetic acid, diluted.

7. HANDLING AND STORAGE

Handling	Do not get in eyes, on skin or on clothing. Do not breathe mist or spray.
Storage	Store in original container. Keep containers tightly closed in a dry, cool and well -ventilated place. Metal containers must be lined. Do not store in non -pigmented containers. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.
Storage Temperature	Minimum 40 °F / 4 °C
Storage Conditions	Maximum 110 °F / 43 °C
	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. Remove and wash contaminated clothing before re -use. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Viscosity	Non viscous
Color	Amber to Greenish yellow	Odor	Sweet
Odor Threshold	Not applicable	Appearance	Transparent - H.c.
pH	> 13.0	Specific Gravity	1.259
Evaporation Rate	0.43 (BuAc = 1)	Percent Volatile (Volume)	82.7
VOC Content (%)	0	VOC Content (g/L)	0
Vapor pressure	13.26 mmHg @ 70°F	Vapor Density	0.6 (Air = 1.0)
Solubility	Completely soluble	n-Octanol/Water Partition	No data available
Melting Point/Range	No data available	Decomposition Temperature	No data available
Boiling Point/Range	No data available	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: 75 Lower: 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	Strong oxidizing agents, Aldehydes, Halogenated hydrocarbon, Acid anhydrides, Acids, Bases.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Hydrogen, by reaction with metals, Carbon oxides, Zinc oxide fumes, Sulfur oxides, Sodium oxides, Hydroxide, Oxides of phosphorus, Fumes.
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	
Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
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. May be fatal if swallowed.
Chronic Toxicity	Inhaled corrosive substances can lead to a toxic edema of the lungs.
Target Organ Effects:	Skin, Eyes, Respiratory system.
Aggravated Medical Conditions	Skin disorders, Respiratory disorders.

Component Information

Acute Toxicity

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
Sodium hydroxide 1310-73-2	325 mg/kg (rat)	= 1350 mg/kg (rabbit)	No data available	No data available	No data available
Sodium tolyltriazole 64665-57-2	640 mg/kg	> 2000 mg/kg (Rabbit)	No data available	No data available	No data available

Chronic Toxicity

Chemical name	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium hydroxide 1310-73-2	No data available	No data available	No data available	No data available	Skin Eyes Respiratory system

Carcinogenicity

There are no known carcinogens in this product.

12. ECOLOGICAL INFORMATION

Product Information No information available.

Additional Ecological Information: No information available

Component Information

Chemical name	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficient
Sodium hydroxide	No information available.	CL50 (Oncorhynchus mykiss, 96h) = 45.4 mg/L	No information available	No information available.	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 SODIUM HYDROXIDE SOLUTION
Hazard Class 8
UN-No UN1824
Packing Group II
Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

TDG

Proper shipping name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
UN-No UN1824
Packing Group II
Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

ICAO

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II
Shipping Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

IATA

UN-No UN1824
Proper Shipping Name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
Packing Group II
ERG-Code 8L
Shipping Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

IMDG/IMO

UN proper shipping name SODIUM HYDROXIDE SOLUTION
Hazard Class 8
UN Number UN1824
Packing Group II
EmS No. F-A, S-B
Description UN1824, SODIUM HYDROXIDE SOLUTION, 8, PG II

15. REGULATORY INFORMATION

Inventories

TSCA Listed

DSL / NDSL Listed

NOTE: This product contains the following component(s) listed on the Canadian NDSL list. All other components are on the Canadian DSL list: Sodium zincate CAS# 12179 -14-5

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values
Sodium zincate	12179-14-5	1-5	1.0

SARA 311/312 Hazardous Categorization

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

Chemical name	Hazardous Substances RQs	CERCLA EHS RQs
Sodium hydroxide	1000 lb	Not applicable

16. OTHER INFORMATION

Prepared By: Pamela Starkey
Supersedes Date: 01/06/2020
Issuing Date: 09/28/2022
Reason for Revision: No information available.
Glossary: No information available.
List of References: No information available.

CHEM-AQUA, INC assumes 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.