

CHEMAQUA  
BOX 152170  
IRVING, TEXAS  
75015

STEW LEONARD'S  
99 FEDERAL RD  
DANBURY, CT 06811

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

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

Customer Number : 462265  
Bill of Lading Number: USA213  
Order Number : 4919535

# Safety Data Sheet: CHEM-AQUA 40215

Supersedes Date 07/14/2017

Issuing Date 04/22/2019

## 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

**Physical state** Liquid

**Odor** Pungent

### GHS Classification

#### Physical Hazards

Corrosive to Metals

Category 1

#### Health Hazard

Skin Corrosion/Irritation  
Serious Eye Damage/Eye Irritation  
Skin sensitization

Category 1

Category 1

Category 1

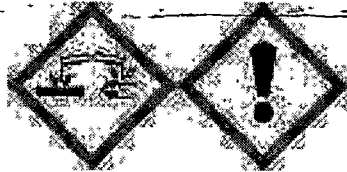
#### Other hazards

None

### Labeling

#### Signal Word

DANGER



#### Hazard statements

H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction  
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.  
P272 - Contaminated work clothing should not be allowed out of the workplace  
P260 - Do not breathe mist  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P333 + P313 - If skin irritation or rash 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 at rest in a position comfortable for breathing.  
P342 + P311 - If experiencing respiratory symptoms, call a physician.  
P406 - Store in a corrosion-resistant container.  
P390 - Absorb spillage to prevent damage.  
P501 - Dispose of contents and container in accordance with applicable local 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
2-Methyl-4-isothiazolin-3-one	2682-20-4	0.1-1.0

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

#### 4. FIRST AID MEASURES

<b>General advice</b>	Do not get in eyes, on skin or on clothing. Do not breathe mist.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Contact a poison control center.
<b>Inhalation</b>	Move to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Call a physician or poison control center immediately. Give small amounts of water to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center.
<b>Notes to physician</b>	The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed. Since reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need to be treated only by supportive measures. May cause sensitization of susceptible persons.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	Does not flash	<b>Method</b>	No data available		
<b>Flammability Limits in Air %:</b>	Hydrogen, by reaction with metals.	<b>Upper:</b>	75	<b>Lower:</b>	4
<b>Suitable Extinguishing Media</b>	Foam. Alcohol-resistant foam. Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.				
<b>Specific hazards arising from the chemical</b>	Thermal decomposition can lead to release of irritating gases and vapors. Contact with metals liberates flammable hydrogen gas. Material can create slippery conditions.				
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.				
<b>NFPA</b>	<b>Health</b> 3	<b>Flammability</b>	0	<b>Instability</b>	0
<b>HMS -</b>	<b>Health</b> 3	<b>Flammability</b>	0	<b>Instability</b>	0

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	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).
<b>Methods for Cleaning Up</b>	Pick up and transfer to properly labeled containers.
<b>Neutralizing Agent</b>	Neutralize with lime milk or soda and flush with plenty of water.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Do not get in eyes, on skin or on clothing. Do not breathe mist.			
<b>Storage</b>	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.			
<b>Storage Temperature</b>	<b>Minimum</b>	34 °F / 1 °C	<b>Maximum</b>	131 °F / 55 °C
<b>Storage Conditions</b>	<b>Indoor</b>	X	<b>Outdoor</b>	<b>Heated</b> <b>Refrigerated</b>

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Measures</b>	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.
<b>Personal Protective Equipment</b>	Tightly fitting safety goggles. Face-shield.
<b>Eye/Face Protection</b>	Wear suitable protective clothing, Impervious gloves.
<b>Skin Protection</b>	In case of inadequate ventilation wear respiratory protection.
<b>Respiratory Protection</b>	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.
<b>General Hygiene Considerations</b>	

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Liquid	<b>Viscosity</b>	Non viscous
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<b>Color</b>	Colorless - Yellow	<b>Odor</b>	Pungent
<b>Odor Threshold</b>	Not applicable	<b>Appearance</b>	Transparent
<b>pH</b>	2	<b>Specific Gravity</b>	1.02
<b>Evaporation Rate</b>	No data available	<b>Percent Volatile (Volume)</b>	No data available
<b>VOC Content (%)</b>	0	<b>VOC Photoreactive (Y/N)</b>	No
<b>VOC Content (g/L)</b>	0	<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No information available	<b>Solubility</b>	Completely soluble
<b>n-Octanol/Water Partition</b>	No data available	<b>Melting Point/Range</b>	No data available
<b>Decomposition Temperature</b>	No data available	<b>Boiling Point/Range</b>	212 °F / 100 °C
<b>Flammability (solid, gas)</b>	No data available		
<b>Flash Point</b>	Does not flash	<b>Method</b>	No data available
<b>Autoignition Temperature</b>	No information available.		
<b>Flammability Limits in Air %:</b>	Hydrogen, by reaction with metals	<b>Upper: 75 Lower: 4</b>	

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable. Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	None known.
<b>Incompatible Products</b>	Strong oxidizing agents, Reducing agents, Amines, Powdered metals, Light and/or alkaline metals, Contact with metals liberates hydrogen gas.
<b>Decomposition Temperature</b>	No data available
<b>Hazardous Decomposition Products</b>	Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride gas.
<b>Possibility of Hazardous Reactions</b>	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

<b>Oral LD50</b>	No information available
<b>Dermal LD50</b>	No information available
<b>Inhalation LC50</b>	
<b>Gas</b>	No information available
<b>Mist</b>	No information available
<b>Vapor</b>	No information available

**Principle Route of Exposure** Skin contact, Eye contact, Inhalation.  
**Primary Routes of Entry** Skin Absorption.

**Acute Effects:**

<b>Eyes</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin</b>	Causes skin burns. May cause allergic skin reaction.
<b>Inhalation</b>	Harmful by inhalation. Causes burns. Risk of serious damage to the lungs (by inhalation).
<b>Ingestion</b>	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	Other
Magnesium nitrate 10377-60-3	= 5440 mg/kg ( Rat )	no data available	No data available	No data available	No data available
5-Chloro-2-methyl-4- isothiazolin-3-one 26172-55-4	= 481 mg/kg ( Rat )	no data available	= 1.23 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	Immune system
2-Methyl-4- isothiazolin-3-one 2682-20-4	No data available	Skin sensitization	No data available	No data available	Immune system

**Carcinogenicity** There are no known carcinogenic chemicals in this product.

## 12. ECOLOGICAL INFORMATION

**Product Information** No information available.

### Component Information

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficient
5-Chloro-2-methyl-4-isothiazolin-3-one	EC50 0.11 - 0.16 mg/L Pseudokirchneriella subcapitata 72 h EC50 0.03 - 0.13 mg/L Pseudokirchneriella subcapitata 96 h	LC50 = 1.6 mg/L Oncorhynchus mykiss 96 h	EC50 = 5.7 mg/L 16 h	4.71: 48 h Daphnia magna mg/L EC50 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	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.  
**Hazard Class** 8  
**UN-No** 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

**Proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
**Hazard Class** 8  
**UN-No** 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

**UN-No** UN3265  
**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
**Hazard Class** 8  
**Packing Group** II  
**Shipping Description** UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE), 8, PG II

### IATA

**UN-No** UN3265  
**Proper Shipping Name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
**Hazard Class** 8  
**Packing Group** II  
**ERG-Code** 8L  
**Shipping Description** UN3265, CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S., (5-CHLORO-2-METHYL-4-ISOTHIAZOLIN-3-ONE), 8, PG II

### IMDG/IMO

**UN proper shipping name** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
**Hazard Class** 8  
**UN 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 Complies  
DSL Complies

### U.S. 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 Hazardous Categorization

See Section 2

### CERCLA

## 16. OTHER INFORMATION

Prepared By Adrienne McKee  
Supersedes Date 07/14/2017  
Issuing Date 04/22/2019  
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.

# Safety Data Sheet: CHEM-AQUA 31865

Supersedes Date: 07/11/2018

Issuing Date: 01/06/2020

## 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 Yellow Green

**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

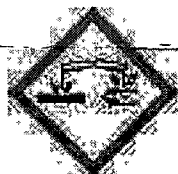
##### Other hazards

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.

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 a corrosion-resistant container.

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

<b>General advice</b>	Do not get in eyes, on skin or on clothing. Do not breathe mist or spray.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately.
<b>Inhalation</b>	Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
<b>Notes to physician</b>	Treat symptomatically. The product causes burns of eyes, skin and mucous membranes. Control of circulatory system, shock therapy if needed.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	Does not flash	<b>Method</b>	No data available
<b>Flammability Limits in Air %:</b>	Hydrogen, by reaction with metals.	<b>Upper:</b>	75
		<b>Lower:</b>	4
<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO2). Dry chemical. Water spray. Foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
<b>Specific hazards arising from the chemical</b>	Contact with metals may evolve flammable hydrogen gas. Material can create slippery conditions.		
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure -demand, NOHSC (approved or equivalent) and full protective gear.		
<b>NFPA</b>	<b>Health</b> 3	<b>Flammability</b>	0
<b>HMS -</b>	<b>Health</b> 3	<b>Flammability</b>	0
		<b>Instability</b>	0

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	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).
<b>Methods for Cleaning Up</b>	Pick up and transfer to properly labeled containers.
<b>Neutralizing Agent</b>	Acetic acid, diluted.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Do not get in eyes, on skin or on clothing. Do not breathe mist or spray.			
<b>Storage</b>	Store in original container. Keep containers tightly closed in a dry, cool and well -ventilated place. Metal containers must be lined. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.			
<b>Storage Temperature</b>	<b>Minimum</b>	40 °F / 4 °C	<b>Maximum</b>	110 °F / 43 °C
<b>Storage Conditions</b>	<b>Indoor</b>	X	<b>Outdoor</b>	<b>Heated</b> <b>Refrigerated</b>

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Sodium hydroxide	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>

<b>Engineering Measures</b>	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.
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection</b>	Tightly fitting safety goggles. Face-shield.
<b>Skin Protection</b>	Wear suitable protective clothing, Impervious gloves.
<b>Respiratory Protection</b>	In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>General Hygiene Considerations</b>	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



<b>Physical state</b>	Liquid	<b>Viscosity</b>	Non viscous
<b>Color</b>	Amber to Yellow Green	<b>Odor</b>	Sweet
<b>Odor Threshold</b>	Not applicable	<b>Appearance</b>	Transparent - Hazy
<b>pH</b>	13.9	<b>Specific Gravity</b>	1.259
<b>Evaporation Rate</b>	0.43 (BuAc = 1)	<b>Percent Volatile (Volume)</b>	82.7
<b>VOC Content (%)</b>	0	<b>VOC Content (g/L)</b>	0
<b>Vapor pressure</b>	13.32 mmHg @ 70°F	<b>Vapor Density</b>	0.6 (Air = 1.0)
<b>Solubility</b>	Completely soluble	<b>n-Octanol/Water Partition</b>	No data available
<b>Melting Point/Range</b>	No data available	<b>Decomposition Temperature</b>	No data available
<b>Boiling Point/Range</b>	No data available	<b>Flammability (solid, gas)</b>	No data available
<b>Flash Point</b>	Does not flash	<b>Method</b>	No data available
<b>Aut ignition Temperature</b>	No information available.		
<b>Flammability Limits in Air %:</b>	Hydrogen, by reaction with metals	<b>Upper: 75 Lower: 4</b>	

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable. Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Keep away from open flames, hot surfaces, and sources of ignition, Extremes of temperature and direct sunlight.
<b>Incompatible Products</b>	Strong oxidizing agents, Aldehydes, Halogenated hydrocarbon, Acid anhydrides, Acids, Bases.
<b>Decomposition Temperature</b>	No data available
<b>Hazardous Decomposition Products</b>	Hydrogen, by reaction with metals, Carbon oxides, Zinc oxide fumes, Sulfur oxides, Sodium oxides, Hydroxide, Oxides of phosphorus.
<b>Possibility of Hazardous Reactions</b>	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

<b>Oral LD50</b>	No information available
<b>Dermal LD50</b>	No information available
<b>Inhalation LC50</b>	
<b>Gas</b>	No information available
<b>Mist</b>	No information available
<b>Vapor</b>	No information available

**Principle Route of Exposure** Skin contact, Eye contact, Inhalation.

**Primary Routes of Entry** Skin contact, Eye contact.

**Acute Effects:**

<b>Eyes</b>	Corrosive to the eyes and may cause severe damage including blindness.
<b>Skin</b>	Causes skin burns.
<b>Inhalation</b>	Harmful by inhalation. Causes burns.
<b>Ingestion</b>	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**

**Target Organ Effects:** Inhaled corrosive substances can lead to a toxic edema of the lungs.

**Aggravated Medical Conditions** Skin, Eyes, Respiratory system.

**Component Information** Skin disorders, Respiratory disorders.

**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 carcinogenic chemicals 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.	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	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** 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 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**

See Section 2

**CERCLA**

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

**16. OTHER INFORMATION**

Prepared By Pamela Starkey  
 Supercedes Date: 07/11/2018  
 Issuing Date: 01/06/2020  
 Reason for Revision No information available.  
 Glossary No information available.  
 List of References. No information available.

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