Safety Data Sheet: CHEM-AQUA 40215

Supercedes Date 12/13/2011 **Issuing Date** 07/09/2013

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 C668
Chemical nature Aqueous solution
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless - Yellow **Physical State** Liquid **Odor** Pungent

GHS
Classification

Physical Hazards

Substances/mixtures corrosive to metal	Category 1

Health Hazard

Acute Inhalation Toxicity - Dusts and Mists	Category 3
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Skin Sensitization	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
H331 - Toxic if inhaled
H290 - May be corrosive to metals

Precautionary Statements
P280 - Wear protective gloves, protective clothing, eye protection and face protection.
P260 - Do not breathe mist
P271 - Use in a well-ventilated area.
P264 - Wash face, hands and any exposed skin thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace
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
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a physician if unwell.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P406 - Store in a corrosion resistant container.
P390 - Absorb spillage to prevent damage
P501 - Dispose of contents and container in accordance with applicable regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Magnesium nitrate	10377-60-3	1-5

5-Chloro-2-methyl-4-isothiazolin-3-one	26172-55-4	1-5
Magnesium chloride	7786-30-3	1-5

4. FIRST AID MEASURES

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

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 Remove immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Contact a poison control center.

Inhalation Move to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion 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.

Notes to physician 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

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

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

Suitable Extinguishing Media

Foam. Alcohol-resistant foam. Carbon dioxide (CO2). 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, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	**Health** 3	**Flammability** 1	**Instability** 0
HMIS	**Health** 3	**Flammability** 1	**Instability** 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 Ensure adequate ventilation. Wear personal protective equipment.

Storage Keep out of the reach of children. Store in original container. Keep containers tightly closed in a cool, 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.

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

Component	ACGIH TLV	OSHA PEL	NIOSH
Magnesium nitrate	No data available	No data available	No data available
5-Chloro-2-methyl-4-isothiazolin-3-one	No data available	No data available	No data available
Magnesium chloride	No data available	No data available	No data available

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	**Viscosity**	Non viscous
Color	Colorless - Yellow	**Odor**	Pungent
Odor Threshold	Not applicable	**Appearance**	Transparent
pH	2	**Specific Gravity**	1.02
Evaporation Rate	0.58 (Butyl acetate=1)	**Percent Volatile (Volume)**	97.9
VOC Content (%)	0	**VOC Photoreactive (Y/N)**	No
VOC Content (g/L)	0	**Vapor Pressure**	17.05 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**	212 °F / 100 °C
Flammability (solid, gas)	No data available		
Flash Point	Does not flash	**Method**	Not applicable
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	None known
Incompatible Products	Strong oxidizing agents, Reducing agents, Amines, Powdered metals, Light and/or alkaline metals, Contact with metals liberates hydrogen gas.
Hazardous Decomposition Products	Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Hydrogen chloride gas.
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	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	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, Blood.
Aggravated Medical Conditions	Skin disorders, Respiratory system.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Magnesium nitrate	= 5440 mg/kg (Rat)	no data available	no data available	no data available	no data available
5-Chloro-2-methyl-4-isothiazolin-3-one	= 481 mg/kg (Rat)	> 1008 mg/kg (Rat)	= 1.23 mg/L (Rat) 4 h	no data available	no data available
Magnesium chloride	= 2800 mg/kg (Rat)	no data available	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Magnesium nitrate	no data available	no data available	no data available	no data available	no data available
5-Chloro-2-methyl-4-isothiazolin-3-one	no data available	Skin sensitization	no data available	no data available	Immune system
Magnesium chloride	no data available	no data available	no data available	no data available	no data available

Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Other
Magnesium nitrate	not applicable	Group 2A	not applicable	X	not applicable
5-Chloro-2-methyl-4-isothiazolin-3-one	not applicable	not applicable	not applicable	not applicable	not applicable
Magnesium 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
Magnesium nitrate	no data available	no data available	no data available	no data available	N/A
5-Chloro-2-methyl-4-isothiazolin-3-one	EC50 = 0.31 mg/L Anabaena flos-aquae 120 h 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	EC50= 4.71 mg/L 48 h EC50 0.12 - 0.3 mg/L 48 h EC50 0.71 - 0.99 mg/L 48 h	-0.71 - 0.75
Magnesium chloride	EC50 = 2200 mg/L Desmodesmus subspicatus 72 h	LC50 = 4210 mg/L Gambusia affinis 96 h LC50 1970 - 3880 mg/L Pimephales promelas 96 h	EC50 = 26140 mg/L 1 h EC50 = 36300 mg/L 30 min EC50 = 77200 mg/L 24 h	EC50= 1400 mg/L 24 h EC50= 140 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 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 Corrosive liquid, acidic, organic, n.o.s.(5-chloro-2-methyl-4-isothiazolin-3-one),8,UN3265,PG II

TDG

Proper shipping name Corrosive liquid, acidic, organic, n.o.s
Hazard Class 8
UN-No UN3265
Packing Group II

ICAO

UN-No UN3265
Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.*
Hazard Class 8
Packing Group II
Shipping Description Corrosive liquid, acidic, organic, n.o.s.*(5-chloro-2-methyl-4-isothiazolin-3-one),8,UN3265,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
Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.
Hazard Class 8
UN-No UN3265
Packing Group II
EmS No. F-A, S-B
Shipping 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
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

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

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
Magnesium nitrate	Not applicable	Not applicable
5-Chloro-2-methyl-4-isothiazolin-3-one	Not applicable	Not applicable
Magnesium chloride	Not applicable	Not applicable

16. OTHER INFORMATION

Prepared By Rachael Mohochi
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Reason for Revision No information available.
Glossary No information available.
List of References. No information available.

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