

Safety Data Sheet: CHEM-AQUA 565

Supersedes Date 08/18/2011

Issuing Date 01/16/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 565
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 0685
Chemical nature Aqueous dispersion
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless - Pale Yellow

Physical State Liquid

Odor Ammoniacal

GHS Classification

Physical Hazards

Substances/mixtures corrosive to metal

Category 1

Health Hazard

Acute Oral Toxicity

Category 4

Skin Corrosion/Irritation

Category 1

Serious Eye Damage/Eye Irritation

Category 1

Specific target organ systemic toxicity (repeated exposure)

Category 2

Other hazards

None

Labeling

Signal Word

DANGER



Hazard Statements

H314 - Causes severe skin burns and eye damage

H302 - Harmful if swallowed

H373 - May cause damage to organs through prolonged or repeated exposure

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

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.

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.

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 %
Sodium nitrite	7632-00-0	5-10
Sodium hydroxide	1310-73-2	1-5

4. FIRST AID MEASURES

General advice	Do not get in eyes, on skin or on clothing. Do not breathe mist.
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 not breathing, give 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. Rinse mouth.
Notes to physician	The product causes burns of eyes, skin and mucous membranes.

5. FIRE-FIGHTING MEASURES

Flash Point	> 201 °F / > 94 °C	Method	Seta closed cup
Flammability Limits in Air % Hydrogen.		Upper	75.0
Suitable Extinguishing Media	Water spray. Foam. Dry chemical. Carbon dioxide (CO ₂). 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, MSHA/NIOSH (approved or equivalent) and full protective gear.		
NFPA	Health 3	Flammability 1	Instability 1
HMIS	Health 3	Flammability 1	Instability 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	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.			
Storage	Store in original container. Metal containers must be lined. Keep containers tightly closed in a dry, cool and well-ventilated place.			
Storage Temperature	Minimum	35 °F / 2 °C	Maximum	120 °F / 49 °C
Storage Conditions	Indoor	X	Outdoor	Heated Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Sodium nitrite	No data available	No data available	No data available
Sodium hydroxide	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³	IDLH: 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. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Non viscous
Color	Colorless - Pale Yellow	Odor	Ammoniacal
Odor Threshold	Not applicable	Appearance	Transparent
pH	13.2	Specific Gravity	1.06
Evaporation Rate	0.55 (Butyl acetate=1)	Percent Volatile (Volume)	95.3
VOC Content (%)	0.4	VOC Content (g/L)	4
Vapor Pressure	16.07 mmHg @ 70°F	Vapor Density	0.6
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	> 201 °F / > 94 °C	Method	Seta closed cup
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Hydrogen.	Upper 75.0 Lower 4.0	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Exposure to air or moisture over prolonged periods
Incompatible Products	Acids and bases, Oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors, Hydrogen.
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	1,256.98
Dermal LD50	84,047.81
Inhalation LC50	
Gas	No information available
Mist	81.48
Vapor	81.43

Principle Route of Exposure	Skin contact, Eye contact, Inhalation.
Primary Routes of Entry	Inhalation, Ingestion.
Acute Effects	
Eyes	Causes burns. Corrosive to the eyes and may cause severe damage including blindness.
Skin	Causes skin burns.
Inhalation	Harmful by inhalation. Causes burns.
Ingestion	Harmful if swallowed. Ingestion causes burns of the upper digestive and respiratory tracts.
Chronic Toxicity	Methemoglobinemia. Inhaled corrosive substances can lead to a toxic edema of the lungs.
Target Organ Effects	Skin, Eyes, Respiratory system, Blood, Central nervous system, Heart, Liver, Lungs, Kidney, Spleen.
Aggravated Medical Conditions	Respiratory system, Skin disorders, Kidney disorders, Liver disorders, Neurological disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Sodium nitrite	= 85 mg/kg (Rat)	no data available	= 5.5 mg/L (Rat) 4 h	no data available	no data available
Sodium hydroxide	no data available	= 1350 mg/kg (Rabbit)	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Sodium nitrite	no data available	no data available	no data available	no data available	liver, kidneys, nervous system, spleen, blood, heart
Sodium hydroxide	no data available	no data available	no data available	no data available	eyes, respiratory system, skin

Carcinogenicity

There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
Sodium nitrite	not applicable	not applicable	not applicable	not applicable	not applicable
Sodium hydroxide	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information	No information available.
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Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Sodium nitrite	no data available	LC50 = 0.19 mg/L Oncorhynchus mykiss 96 h LC50 0.092 - 0.13 mg/L Oncorhynchus mykiss 96 h LC50 0.4 - 0.6 mg/L Oncorhynchus mykiss 96 h LC50 0.65 - 1 mg/L Oncorhynchus mykiss 96 h LC50 = 2.3 mg/L Pimephales promelas 96 h LC50 = 20 mg/L Pimephales promelas 96 h	no data available	no data available	-3.7
Sodium hydroxide	no data available	LC50 = 45.4 mg/L Oncorhynchus mykiss 96 h	no data available	no data available	N/A

Persistence and Degradability
Bioaccumulation
Mobility

No information available.
No information available.
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

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Caustic alkali liquids, n.o.s.
Hazard Class 8
UN-No UN1719
Packing Group III
Reportable Quantity (RQ) Sodium nitrite, RQ kg = 672.5946
Description Caustic alkali liquids, n.o.s.(Sodium Hydroxide),8,UN1719,PG III

TDG

Proper shipping name Caustic alkali liquid, n.o.s
Hazard Class 8
UN-No UN1719
Packing Group III

ICAO

UN-No UN1719
Proper Shipping Name Caustic alkali liquid, n.o.s.
Hazard Class 8
Packing Group III

IATA

UN-No UN1719
Proper Shipping Name Caustic alkali liquid, n.o.s.*
Hazard Class 8
Packing Group III
ERG Code 8L
Shipping Description UN1719,Caustic alkali liquid, n.o.s., (Sodium hydroxide),8,PG III

IMDG/IMO

Proper Shipping Name Caustic alkali liquid, n.o.s.
Hazard Class 8
UN-No UN1719
Packing Group III
EmS No. F-A, S-B
Shipping Description UN1719, Caustic alkali liquid, n.o.s., (Sodium hydroxide),8,PG III

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
Sodium nitrite	7632-00-0	5-10	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
Sodium nitrite	100 lb	Not applicable
Sodium hydroxide	1000 lb	Not applicable

16. OTHER INFORMATION

Prepared By	Angela Hutson
Supersedes Date	08/18/2011
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Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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