

Safety Data Sheet: CHEM-AQUA 655T

Supersedes Date 05/16/2013

Issuing Date 07/30/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name CHEM-AQUA 655T
Recommended use Water treatment chemical
Information on Manufacturer
CHEM-AQUA, INC
BOX 152170
IRVING, TEXAS 75015

Product Code 817C
Chemical nature Acidic Aqueous solution
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color Colorless

Physical State Liquid

Odor Odorless

GHS

Classification

Physical Hazards

Substances/mixtures corrosive to metal

Category 1

Health Hazard

Skin Corrosion/Irritation

Category 2

Serious Eye Damage/Eye Irritation

Category 2A

Specific target organ systemic toxicity (single exposure)

Category 3

Specific target organ systemic toxicity (repeated exposure)

Category 2

Other hazards

None

Labeling

Signal Word

WARNING



Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

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.

P271 - Use in a well-ventilated area.

P302+ P352 - IF ON SKIN: Wash with plenty of soap and water

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

P362 - Take off contaminated clothing and wash 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.

P337 + P313 - If eye irritation persists, get medical attention.

P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P312 - 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.

1 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Monosodium phosphate, anhydrous	7558-80-7	30-60
Phosphoric acid	7664-38-2	1-5

4. FIRST AID MEASURES

General advice	Avoid contact with skin, eyes and clothing. Avoid breathing 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	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
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.

5. FIRE-FIGHTING MEASURES

Flash Point	> 201 °F / > 94 °C	Method	Seta closed cup
Flammability Limits in Air % Hydrogen.		Upper 75	Lower 4
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.		
Specific hazards arising from the chemical	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 2	Flammability 1	Instability 0
HMIS	Health 2	Flammability 1	Instability 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	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust)
Neutralizing Agent	Neutralize with lime milk or soda and flush with plenty of water.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Avoid breathing mist.				
Storage	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.				
Storage Temperature	Minimum	45 °F / 7 °C		Maximum	110 °F / 43 °C
Storage Conditions	Indoor	X	Outdoor	Heated	Refrigerated

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Monosodium phosphate, anhydrous	No data available	5 mg/m ³ PNOR (as solid)	No data available
Phosphoric acid	TWA: 1 mg/m ³ STEL: 3 mg/m ³	TWA: 1 mg/m ³	1000 mg/m ³ STEL 3 mg/m ³ TWA: 1 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.
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	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	Odor	Odorless
Odor Threshold	Not applicable	Appearance	Transparent
pH	2.77	Specific Gravity	1.38
Evaporation Rate	0.34 (Butyl acetate=1)	Percent Volatile (Volume)	71.4
VOC Content (%)	0	VOC Content (g/L)	0
Vapor Pressure	11.28 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	217 °F / 103 °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 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
Incompatible Products	Strong oxidizing agents, Acids, Bases, Metals.
Hazardous Decomposition Products	Carbon oxides, Oxides of phosphorus, Hydrogen, by reaction with metals.
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.
Primary Routes of Entry	Ingestion

Acute Effects

Eyes	Severe irritation.
Skin	Severe irritation.
Inhalation	Causes respiratory tract irritation.
Ingestion	Irritating to mouth, throat, and stomach. Blood disorder may occur after ingestion. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irregular cardiac activity.

Chronic Toxicity Kidney injury may occur.

Target Organ Effects Eyes, Respiratory system, Skin, Kidney, Heart, Central nervous system.

Aggravated Medical Conditions Skin disorders, Neurological disorders, Respiratory disorders, Kidney disorders.

Component Information

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
Monosodium phosphate, anhydrous	= 8290 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	no data available	no data available	no data available
Phosphoric acid	= 1530 mg/kg (Rat)	= 2730 mg/kg (Rabbit)	> 850 mg/m ³ (Rat) 1 h	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Monosodium phosphate, anhydrous	no data available	no data available	no data available	no data available	CNS, heart, kidney
Phosphoric acid	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.
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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
Phosphoric acid	no data available	LC50 3 - 3.5 mg/L <i>Gambusia affinis</i> 96 h	no data available	EC50 4.6 mg/L <i>Daphnia magna</i> 12 h	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.

14. TRANSPORT INFORMATION

DOT

Not regulated

TDG

Not regulated

ICAO

Not regulated

IATA

Not regulated

IMDG/IMO

Not regulated

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 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 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
Phosphoric acid	5000 lb	Not applicable

16. OTHER INFORMATION

Prepared By

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07/30/2014

Reason for Revision

No information available.

Glossary

No information available.

List of References.

No information available.

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