

# MATERIAL SAFETY DATA SHEET

## Section 1. Chemical Product and Company Identification

**Product Name:** ChemTreat CL416  
**Product Use:** Cooling Water Treatment  
**Supplier's Name:** ChemTreat, Inc.  
**Emergency Telephone Number:** (800) 424-9300 (Toll Free)  
(703) 527-3887  
**Address (Corporate Headquarters):** 5640 COX ROAD  
Glen Allen, VA 23060  
**Telephone Number for Information:** (800) 648-4579  
**Date of MSDS:** August 22, 2012

## Section 2. Hazard(s) Identification



**Signal Word:** DANGER!

**Hazard Statement(s):** Causes severe skin burns and eye damage.  
Causes serious eye damage.  
Harmful in contact with skin.  
Harmful if inhaled.  
Harmful if swallowed.

**Precautionary Statement(s):** Wear protective gloves/clothing and eye/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area.

## Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt. %
Citric acid	77-92-9	10 - 30
1-Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	1 - 5

## ***Section 4. First Aid Measures***

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<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
<b>Eyes:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
<b>Skin:</b>	Immediately remove/take off all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before re-use. Immediately call a poison center or doctor/physician.
<b>Ingestion:</b>	DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician.
<b>Notes to Physician:</b>	N/A
<b>Additional First Aid Remarks:</b>	N/A

## ***Section 5. Fire Fighting Measures***

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<b>Flammability of the Product:</b>	Not flammable.
<b>Suitable Extinguishing Media:</b>	Use extinguishing media suitable to surrounding fire.
<b>Specific Hazards Arising from the Chemical:</b>	None known.
<b>Protective Equipment:</b>	If product is involved in a fire, wear full protective clothing including a positive-pressure, NIOSH approved, self-contained breathing apparatus.

## ***Section 6. Accidental Release Measures***

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<b>Personal Precautions:</b>	Use appropriate Personal Protective Equipment (PPE).
<b>Environmental Precautions:</b>	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
<b>Methods for Cleaning up:</b>	Contain and recover liquid when possible. Flush spill area with water spray.
<b>Other Statements:</b>	None.

## Section 7. Handling and Storage

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**Handling:** Wear appropriate Personal Protective Equipment (PPE) when handling this product. Do not get in eyes, or on skin and clothing. Wash thoroughly after handling. Do not ingest. Avoid breathing vapors, mist or dust.

**Storage:** Store away from incompatible materials (see Section 10). Store at ambient temperatures. Keep container securely closed when not in use. Label precautions also apply to empty container. Recondition or dispose of empty containers in accordance with government regulations. For Industrial use only.

## Section 8. Exposure Controls/Personal Protection

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### Exposure Limits

Component	Source	Exposure Limits
Citric acid		N/E
1-Hydroxyethylidene-1,1-diphosphonic acid		N/E

### Carcinogenicity Category

Component	Source	Code	Brief Description
Citric acid			N/E
1-Hydroxyethylidene-1,1-diphosphonic acid			N/E

**Engineering Controls:** Use only with adequate ventilation. The use of local ventilation is recommended to control emission near the source.

### Personal Protection

**Eyes:** Wear chemical splash goggles or safety glasses with full-face shield. Maintain eyewash fountain in work area.

**Skin:** Maintain quick-drench facilities in work area. Wear butyl rubber or neoprene gloves. Wash them after each use and replace as necessary. If conditions warrant, wear protective clothing such as boots, aprons, and coveralls to prevent skin contact.

**Respiratory:** If misting occurs, use NIOSH approved organic vapor/acid gas dual cartridge respirator with a dust/mist prefilter in accordance with 29 CFR 1910.134.

## Section 9. Physical and Chemical Properties

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<b>Physical State and Appearance:</b>	Liquid, Colorless, Clear
<b>Specific Gravity:</b>	1.093 @ 20°C
<b>pH:</b>	1.0 @ 20°C, 100.0%
<b>Freezing Point:</b>	32°F
<b>Flash Point:</b>	N/D
<b>Odor:</b>	Mild
<b>Melting Point:</b>	N/A
<b>Boiling Point:</b>	N/D
<b>Solubility in Water:</b>	Complete
<b>Evaporation Rate:</b>	N/D
<b>Vapor Density:</b>	N/D
<b>Molecular Weight:</b>	N/D
<b>Viscosity:</b>	N/A
<b>Flammable Limits:</b>	N/A
<b>Autoignition Temperature:</b>	N/A
<b>Density:</b>	9.12 lb/ga
<b>Vapor Pressure:</b>	N/D
<b>% VOC</b>	N/D

## Section 10. Stability and Reactivity

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<b>Chemical Stability:</b>	Stable at normal temperatures and pressures.
<b>Incompatibility with Various Substances:</b>	Bases, Strong oxidizers
<b>Hazardous Decomposition Products:</b>	Oxides of phosphorus, Oxides of carbon
<b>Possibility of Hazardous Reactions:</b>	None known.

## Section 11. Toxicological Information

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Chemical Name	Exposure	Type of Effect	Concentration	Species
1-Hydroxyethylidene-1,1-diphosphonic acid	Oral	LD50	2400 mg/kg	Rat
	Dermal	LD50	7940 mg/kg	Rabbit

**Comments:** None.

## ***Section 12. Ecological Information***

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<b>Species</b>	<b>Duration</b>	<b>Type of Effect</b>	<b>Test Results</b>
Ceriodaphnia dubia	48h	LC50	>1000 mg/l
Fathead Minnow	96h	LC50	>1000 mg/l
Sheepshead Minnow	96h	LC50	>1000 mg/l
Mysid Shrimp	48h	LC50	>1000 mg/l
Rainbow Trout	96h	LC50	7906 mg/l

**Comments:** Aquatic toxicity data is based on testing of a similar product.

## ***Section 13. Disposal Considerations***

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Dispose of in accordance with local, state and federal regulations.  
EPA corrosivity characteristic hazardous waste D002 when disposed of in the original product form.

## ***Section 14. Transport Information***

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### **DOT**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
**Technical Name:** (CITRIC ACID)  
**Hazard Class:** Corrosive  
**UN/NA#:** UN3265  
**Packing Group:** PGIII

### **TDG**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.  
**Technical Name:** (CITRIC ACID)  
**Hazard Class:** Corrosive  
**UN/NA#:** UN3265  
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## ***Section 15. Regulatory Information***

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**Inventory Status**

**United States (TSCA):** All ingredients listed.  
**Canada (DSL/NDSL):** All ingredients listed.

**Federal Regulations**

**SARA Title III Rules**

**Sections 311/312 Hazard Classes**

**Fire Hazard:** No  
**Reactive Hazard:** No  
**Release of Pressure:** No  
**Acute Health Hazard:** Yes  
**Chronic Health Hazard:** No

**Other Sections**

Component	Section 313 Toxic Chemical	Section 302 EHS TPQ	CERCLA RQ
Citric acid	N/A	N/A	N/A
1-Hydroxyethylidene-1,1-diphosphonic acid	N/A	N/A	N/A

**Comments:** None.

**State Regulations**

**California Proposition 65:** None known.

**Special Regulations**

Component	States
Citric acid	None
1-Hydroxyethylidene-1,1-diphosphonic acid	None

**International Regulations**

**Canada**

**WHMIS Classification:** D2B (Toxic Material)  
 E (Corrosive Material)

**Controlled Product Regulations (CPR):** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

## Section 16. Other Information

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### HMIS Hazard Rating

**Health:** 2  
**Flammability:** 0  
**Physical Hazard:** 1  
**PPE:** X

**Notes:** The PPE rating depends on circumstances of use. See Section 8 for recommended PPE.  
 The Hazardous Material Information System (HMIS) is a voluntary, subjective alpha-numeric symbolic system for recommending hazard risk and personal protection equipment information. It is a subjective rating system based on the evaluator's understanding of the chemical associated risks. The end-user must determine if the code is appropriate for their use.

**NSF:** Certified to NSF/ANSI Standard 60  
 This product ships as NSF from:  
 Ashland, VA  
 Eldridge, IA  
 Nederland, TX  
 Vernon, CA

**FDA/USDA/GRAS:** Generally Recognized as Safe (GRAS) by the FDA at 21 CFR 184.1033.

**KOSHER:** This product is certified by the Orthodox Union as Kosher for Passover and year-round use.  
 Only when prepared by the following ChemTreat facilities: Ashland, VA; Eldridge, IA; Nederland, TX; Vernon, CA.

**FIFRA:** N/A

**Other:** None

### Abbreviations

Abbreviation	Definition
<	Less Than
>	Greater Than
ACGIH	American Conference of Governmental Industrial Hygienists
EHS	Environmental Health and Safety Dept
N/A	Not Applicable
N/D	Not Determined
N/E	Not Established
OSHA	Occupational Health and Safety Dept
PEL	Personal Exposure Limit
STEL	Short Term Exposure Limit



TLV	Threshold Limit Value
TWA	Time Weight Average
UNK	Unknown

**Prepared by: Regulatory Affairs Department**

## ***Disclaimer***

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