



## MATERIAL SAFETY DATA SHEET

### Section 1. Chemical Product and Company Identification

Product Name: Quadrasperse CL4846  
Product Use: Cooling Water Treatment  
Supplier's Name: ChemTreat, Inc.  
Emergency Telephone Number: (800) 424-9300 (Toll Free)  
(703) 527-3887  
Address (Corporate Headquarters): 4461 Cox Road  
Glen Allen, VA 23060  
Telephone Number for Information: (800) 648-4579  
Date of MSDS: January 6, 2011

### 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. %
2-Phosphono-1,2,4-butane tricarboxylic acid	37971-36-1	3 - 7
Potassium hydroxide	1310-58-3	3 - 7
Sodium molybdate	7631-95-0	1 - 5
Tolyltriazole, sodium salt	64665-57-2	0.5 - 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>	If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.



## Section 7. Handling and Storage

- 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.  
Do not store or handle in aluminum, zinc, copper, or their alloys.

## Section 8. Exposure Controls/Personal Protection

### Exposure Limits

Component	Source	Exposure Limits
2-Phosphono-1,2,4-butane tricarboxylic acid		N/E
Potassium hydroxide	ACGIH TLV	2 mg/m <sup>3</sup> Ceiling
Sodium molybdate		N/E
Tolyltriazole, sodium salt		N/E

### Carcinogenicity Category

Component	Source	Code	Brief Description
2-Phosphono-1,2,4-butane tricarboxylic acid			N/E
Potassium hydroxide			N/E
Sodium molybdate			N/E
Tolyltriazole, sodium salt			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

Physical State and Appearance:	Liquid, Dark Straw, Clear
Specific Gravity:	1.159 @ 20°C
pH:	13.4 @ 20°C, 100.0%
Freezing Point:	27°F
Flash Point:	N/D
Odor:	Mild
Melting Point:	N/A
Boiling Point:	N/D
Solubility in Water:	Complete
Evaporation Rate:	Similar to water
Vapor Density:	Similar to water
Molecular Weight:	N/D
Viscosity:	N/A
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	9.67 lb/ga
Vapor Pressure:	Similar to water
% VOC	N/D

## Section 10. Stability and Reactivity

Chemical Stability:	Stable at normal temperatures and pressures.
Incompatibility with Various Substances:	Acids, Strong oxidizers
Hazardous Decomposition Products:	Oxides of phosphorus, Oxides of nitrogen
Possibility of Hazardous Reactions:	None known.

## Section 11. Toxicological Information

Chemical Name	Exposure	Type of Effect	Concentration	Species
2-Phosphono-1,2,4-butane tricarboxylic acid	Oral	LD50	>6500 mg/kg	Rat
Potassium hydroxide	Oral	LD50	365 mg/kg	Rat
Sodium molybdate	Oral	LD50	2810 mg/kg	Rat
Tolyltriazole, sodium salt	Oral	LD50	920 mg/kg	Rat
	Dermal	LD50	>2 g/kg	Rabbit

Comments: None.



## Section 12. Ecological Information

Species	Duration	Type of Effect	Test Results
Fathead Minnow	96h	LC50	>1000 mg/l
Ceriodaphnia dubia	48h	LC50	>1000 mg/l

Comments: None.

## Section 13. Disposal Considerations

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

### DOT Classification

DOT Name: POTASSIUM HYDROXIDE SOLUTION  
Technical Name: N/A  
Hazard Class: Corrosive  
UN/NA#: UN1814  
Packing Group: PGII

## Section 15. Regulatory Information

### 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	GERCLA RQ
2-Phosphono-1,2,4-butane tricarboxylic acid	N/A	N/A	N/A
Potassium hydroxide	N/A	N/A	1000
Sodium molybdate	N/A	N/A	N/A
Tolyltriazole, sodium salt	N/A	N/A	N/A

### State Regulations

California Proposition 65: None known.

### Special Regulations

Component	States
2-Phosphono-1,2,4-butane tricarboxylic acid	None
Potassium hydroxide	MA, MN, NY, PA, WA
Sodium molybdate	None
Tolyltriazole, sodium salt	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: 3  
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: N/A

FDA: N/A

KOSHER: This product is certified by the Orthodox Union as kosher pareve. 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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