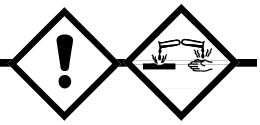
# *MATERIAL SAFETY DATA SHEET*

## *Section 1. Chemical Product and Company Identification*

| | |
|---|---|
| **Product Name:** | Quadrasperse® CL4802 |
| **Product Use:** | Cooling Water Treatment |
| **Supplier's Name:** | ChemTreat, Inc. |
| **Emergency Telephone Number:** | (800) 424−9300 (Toll Free)<br>(703) 527−3887 |
| **Address (Corporate Headquarters):** | 5640 COX ROAD<br>Glen Allen, VA 23060 |
| **Telephone Number for Information:** | (800) 648−4579 |
| **Date of MSDS:** | July 26, 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.% |
|---|---|---|
| Phosphoric acid | 7664−38−2 | 7 − 13 |
| 1−Hydroxyethylidene−1,1−diphosphonic acid | 2809−21−4 | 1 − 5 |
| Zinc chloride | 7646−85−7 | 1 − 5 |

## *Section 4. First Aid Measures*

| | |
|---|---|
| **Inhalation:** | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. |
| **Eyes:** | 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. |
| **Skin:** | 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. |
| **Ingestion:** | DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician. |
| **Notes to Physician:** | N/A |
| **Additional First Aid Remarks:** | N/A |

## *Section 5. Fire Fighting Measures*

| | |
|---|---|
| **Flammability of the Product:** | Not flammable. |
| **Suitable Extinguishing Media:** | Use extinguishing media suitable to surrounding fire. |
| **Specific Hazards Arising from the Chemical:** | None known. |
| **Protective Equipment:** | 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*

| | |
|---|---|
| **Personal Precautions:** | Use appropriate Personal Protective Equipment (PPE). |
| **Environmental Precautions:** | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. |
| **Methods for Cleaning up:** | Contain and recover liquid when possible. Flush spill area with water spray. |
| **Other Statements:** | 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.

## *Section 8. Exposure Controls/Personal Protection*

### Exposure Limits

| Component | Source | Exposure Limits |
|---|---|---|
| Phosphoric acid | ACGIH TLV | 3 mg/m³ STEL |
| | OSHA PEL | 1 mg/m³ TWA |
| 1−Hydroxyethylidene−1,1−diphosphonic acid | | N/E |
| Zinc chloride | | N/E |

### Carcinogenicity Category

| Component | Source | Code | Brief Description |
|---|---|---|---|
| Phosphoric acid | | | N/E |
| 1−Hydroxyethylidene−1,1−diphosphonic acid | | | N/E |
| Zinc chloride | | | 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, Straw, Clear |
| **Specific Gravity:** | 1.189 @ 20°C |
| **pH:** | 0.7 @ 20°C, 100.0% |
| **Freezing Point:** | 21°F |
| **Flash Point:** | N/D |
| **Odor:** | Mild |
| **Melting Point:** | N/A |
| **Boiling Point:** | N/D |
| **Solubility in Water:** | Complete |
| **Evaporation Rate:** | As Water |
| **Vapor Density:** | As Water |
| **Molecular Weight:** | N/D |
| **Viscosity:** | N/A |
| **Flammable Limits:** | N/A |
| **Autoignition Temperature:** | N/A |
| **Density:** | 9.92 lb/ga |
| **Vapor Pressure:** | As Water |
| **% VOC** | 0 |

## Section 10. Stability and Reactivity

**Chemical Stability:** Stable at normal temperatures and pressures.

**Incompatibility with Various Substances:** Bases, Strong oxidizers

**Hazardous Decomposition Products:** Oxides of phosphorus

**Possibility of Hazardous Reactions:** None known.

## Section 11. Toxicological Information

| Chemical Name | Exposure | Type of Effect | Concentration | Species |
|---|---|---|---|---|
| Phosphoric acid | Dermal | LD50 | 2740 mg/kg | Rabbit |
| | Oral | LD50 | 1530 mg/kg | Rat |
| 1−Hydroxyethylidene−1,1−diphosphonic acid | Oral | LD50 | 2400 mg/kg | Rat |
| | Dermal | LD50 | 7940 mg/kg | Rabbit |
| Zinc chloride | Oral | LD50 | 350 mg/kg | Rat |

**Comments:** None.

## Section 12. Ecological Information

| Species | Duration | Type of Effect | Test Results |
|---|---|---|---|
| Ceriodaphnia dubia | 48h | LC50 | 61 mg/l |
| Fathead Minnow | 96h | LC50 | 315 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**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
**Technical Name:** (PHOSPHORIC ACID AND ZINC CHLORIDE)
**Hazard Class:** Corrosive
**UN/NA#:** UN3264
**Packing Group:** PGII

**Over 2724 GA**

**Proper Shipping Name:** RQ CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
**Technical Name:** (PHOSPHORIC ACID AND ZINC CHLORIDE)
**Hazard Class:** Corrosive
**UN/NA#:** UN3264
**Packing Group:** PGII

**TDG**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
**Technical Name:** (PHOSPHORIC ACID AND ZINC CHLORIDE)
**Hazard Class:** Corrosive
**UN/NA#:** UN3264
**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 | CERCLA RQ |
|---|---|---|---|
| Phosphoric acid | No | N/A | 5000 |
| 1−Hydroxyethylidene−1,1−diphosphonic acid | N/A | N/A | N/A |
| Zinc chloride | Yes | N/A | 1000 |

**Comments:** Zinc compounds are Section 313 Chemical Category Code N982.

**State Regulations**

**California Proposition 65:** None known.

**Special Regulations**

| Component | States |
|---|---|
| Phosphoric acid | MA, MN, NY, WA |
| 1−Hydroxyethylidene−1,1−diphosphonic acid | None |
| Zinc chloride | MA, MI, MN, NY, PA, WA |

**International Regulations**

**Canada**

| | |
|---|---|
| **WHMIS Classification:** | D2B (Toxic Material)<br>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*

**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.<br>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/USDA/GRAS:** N/A

**KOSHER:** This product has not been evaluated for Kosher approval.

**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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