



SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

| | |
|--|---------------------------------------|
| Product Name: | Quadrasperse® CL5898 |
| Product Use: | Cooling Water Treatment |
| Supplier's Name: | ChemTreat, Inc. |
| Emergency Telephone Number: | (800)424-9300 (Toll Free) |
| Address (Corporate Headquarters): | 5640 Cox Road Glen Allen, VA 23060 |
| Telephone Number for Information: | (800)648-4579 |
| Date of SDS: | April 26, 2018 |
| Revision Date: | April 26, 2018 |
| Revision Number: | DRAFT-180426010914AN |

Section 2. Hazard(s) Identification



| | |
|------------------------------------|---|
| Signal Word: | WARNING |
| GHS Classification(s): | Eye damage/irritation – Category 2b Acute Toxicity Dermal – Category 4 Acute Toxicity Inhalation – Category 4 Acute Toxicity Oral – Category 4 |
| Hazard Statement(s): | H320 Causes eye irritation. H312 Harmful in contact with skin. H332 Harmful if inhaled. H302 Harmful if swallowed. |
| Precautionary Statement(s): | |
| Prevention: | P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash thoroughly after handling. P270 Do not eat, drink, or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection/face protection. |



Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P337 + P313 If eye irritation persists, get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

None.

Disposal:

P501 Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

System of Classification Used:

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified:

None.

Section 3. Composition/Hazardous Ingredients

| Component | CAS Registry # | Wt. % |
|---|----------------|-------|
| 2-Phosphono-1,2,4-butane tricarboxylic acid | 37971-36-1 | 3 - 7 |
| Benzotriazole, sodium salt | 15217-42-2 | 1 - 5 |

Comments

If chemical identity and/or exact percentage of composition has been withheld, this information is considered to be a trade secret.



Section 4. First Aid Measures

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|--|--|
| Inhalation: | Remove to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. |
| Eyes: | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. |
| Skin: | Wash with plenty of soap and water. Call a poison center or doctor/physician if you feel unwell. |
| Ingestion: | DO NOT INDUCE VOMITING. Rinse mouth. Call a POISON CENTER or doctor/physician. |
| Most Important Symptoms: | N/D |
| Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary: | 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: | Use water spray to keep containers cool. |
| 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

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|-----------------------------------|--|
| 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

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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. Store above Freeze Point. |

Section 8. Exposure Controls/Personal Protection

Exposure Limits

| Component | Source | Exposure Limits |
|---|--------|-----------------|
| 2-Phosphono-1,2,4-butane tricarboxylic acid | N/E | N/E |
| Benztotriazole, sodium salt | N/E | 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: | 1.077 – 1.090 @ 20°C |
| pH: | 3.8 @ 20°C, 100.0% |
| Freezing Point: | 41°F |
| Flash Point: | N/D |
| Odor: | Mild |
| Melting Point: | N/A |
| Initial Boiling Point and Boiling Range: | N/D |
| Solubility in Water: | Complete |
| Evaporation Rate: | N/D |
| Vapor Density: | N/D |
| Molecular Weight: | N/D |
| Viscosity: | <100 CPS @ 20°C |
| Flammability (solid, gas): | N/D |
| Flammable Limits: | N/A |
| Autoignition Temperature: | N/A |
| Density: | 9.07 LB/GA |
| Vapor Pressure: | N/D |
| % VOC: | N/D |
| Odor Threshold | N/D |
| n-octanol Partition Coefficient | N/D |
| Decomposition Temperature | N/D |

Section 10. Stability and Reactivity

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|---|--|
| Chemical Stability: | Stable at normal temperatures and pressures. |
| Incompatibility with Various Substances: | Strong oxidizers, Strong bases. |
| Hazardous Decomposition Products: | Oxides of phosphorus, Oxides of sulfur. |
| Possibility of Hazardous Reactions: | None known. |
| Reactivity: | N/D |
| Conditions To Avoid: | N/D |

Section 11. Toxicological Information

Acute Toxicity

| Chemical Name | Exposure | Type of Effect | Concentration | Species |
|---|----------|----------------|---------------|---------|
| 2-Phosphono-1,2,4-butane tricarboxylic acid | Oral | LD50 | >6500 MG/KG | Rat |

Carcinogenicity Category

| Component | Source | Code | Brief Description |
|---|--------|------|-------------------|
| 2-Phosphono-1,2,4-butane tricarboxylic acid | N/E | N/E | N/E |
| Benzotriazole, sodium salt | N/E | N/E | N/E |

Likely Routes of Exposure: N/D

Symptoms

| | |
|----------------------|-----|
| Inhalation: | N/D |
| Eye Contact: | N/D |
| Skin Contact: | N/D |
| Ingestion: | N/D |

Skin Corrosion/Irritation: N/D



Serious Eye Damage/Eye Irritation: N/D

Sensitization: N/D

Germ Cell Mutagenicity: N/D

Reproductive/Developmental Toxicity: N/D

Specific Target Organ Toxicity

 Single Exposure: N/D

 Repeated Exposure: N/D

Aspiration Hazard: N/D

Comments: None.

Section 12. Ecological Information

Ecotoxicity

| Species | Duration | Type of Effect | Test Results |
|--------------------|----------|----------------|--------------|
| Fathead Minnow | 96h | LC50 | 2739 mg/l |
| Ceriodaphnia dubia | 48h | LC50 | 1786 mg/l |

Persistence and Biodegradability: N/D

Bioaccumulative Potential: N/D

Mobility In Soil: N/D

Other Adverse Effects: N/D

Comments: None.



Section 13. Disposal Considerations

Dispose of in accordance with local, state and federal regulations.

Section 14. Transport Information

| Controlling Regulation | UN/NA#: | Proper Shipping Name: | Technical Name: | Hazard Class: | Packing Group: |
|------------------------|---------|--|-----------------|---------------|----------------|
| DOT | N/A | COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID | N/A | N/A | N/A |
| IMDG | N/A | COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID | N/A | N/A | N/A |
| TDG | N/A | COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID | N/A | N/A | N/A |
| ICAO | N/A | COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID | N/A | N/A | N/A |

Note: N/A

Section 15. Regulatory Information

Inventory Status

United States (TSCA):
Canada (DSL/NDSL):

All ingredients listed.
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 |
|---|-------------------------------|------------------------|-----------|
| 2-Phosphono-1,2,4-butane tricarboxylic acid | N/A | N/A | N/A |
| Benzotriazole, sodium salt | N/A | N/A | N/A |

Comments: None.

State Regulations

California Proposition 65: None known.

Special Regulations

| Component | States |
|---|--------|
| 2-Phosphono-1,2,4-butane tricarboxylic acid | None. |
| Benzotriazole, sodium salt | None. |

International Regulations

Canada

WHMIS Classification: D2B (Toxic 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.

Compliance Information

NSF: N/A

Food Regulations: 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.

Halal: This product has not been evaluated for Halal approval.

FIFRA: N/A

Other: None

Comments: None.

Section 16. Other Information

HMIS Hazard Rating

| | |
|------------------|---|
| Health: | 2 |
| Flammability: | 0 |
| Physical Hazard: | 0 |
| 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.

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 |

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Disclaimer

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