

# MATERIAL SAFETY DATA SHEET

## Section 1. Chemical Product and Company Identification

**Product Name:** ChemTreat BL4350  
**Product Use:** Boiler 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:** June 28, 2013

## Section 2. Hazard(s) Identification



**Signal Word:** WARNING!

**Hazard Statement(s):** May be harmful in contact with skin.  
May be harmful if inhaled.  
May be harmful if swallowed.

**Precautionary Statement(s):** No significant health risks are expected from exposures under normal conditions of use.

## Section 3. Composition/Hazardous Ingredients

Component	CAS Registry #	Wt. %
1-Hydroxyethylidene-1,1-diphosphonic acid, tetrapotassium salt	14860-53-8	1 - 5

## Section 4. First Aid Measures

**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 if you feel unwell.

**Notes to Physician:** N/A

**Additional First Aid Remarks:** N/A

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

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**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***

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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:** 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
1-Hydroxyethylidene-1,1-diphosphonic acid, tetrapotassium salt		N/E

### Carcinogenicity Category

Component	Source	Code	Brief Description
1-Hydroxyethylidene-1,1-diphosphonic acid, tetrapotassium 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

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### Physical State and Appearance:

Liquid, Light Straw, Clear

### Specific Gravity:

1.134 @ 20°C

### pH:

9.2 @ 20°C, 100.0%

### Freezing Point:

30°F

### Flash Point:

N/D

### Odor:

Mild

### Melting Point:

N/D

### Boiling Point:

212°F

### Solubility in Water:

Complete

### Evaporation Rate:

N/D

### Vapor Density:

As Water

### Molecular Weight:

N/D

### Viscosity:

<100 CPS @ 20°C

### Flammable Limits:

N/A

Autoignition Temperature: N/A  
Density: 9.46 lb/ga  
Vapor Pressure: As Water  
% VOC: 0

## Section 10. Stability and Reactivity

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

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

**Hazardous Decomposition Products:** None known.

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

## Section 11. Toxicological Information

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

**Comments:** None.

## Section 12. Ecological Information

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Species	Duration	Type of Effect	Test Results
Ceriodaphnia dubia	48h	LC50	>1000 mg/l
Fathead Minnow	96h	LC50	>1000 mg/l
	48h	LC50	1768 mg/l
Daphnia pulex	48h	LC50	1708 mg/l

**Comments:** None.

## Section 13. Disposal Considerations

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Dispose of in accordance with local, state and federal regulations.  
Not a RCRA-regulated hazardous waste when disposed in the original product form.

## Section 14. Transport Information

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### DOT

<b>Proper Shipping Name:</b>	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID
<b>Technical Name:</b>	N/A
<b>Hazard Class:</b>	Not D.O.T. Regulated
<b>UN/NA#:</b>	N/A
<b>Packing Group:</b>	N/A

### IMDG

<b>Proper Shipping Name:</b>	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID
<b>Technical Name:</b>	N/A
<b>Hazard Class:</b>	Not D.O.T. Regulated
<b>UN/NA#:</b>	N/A
<b>Packing Group:</b>	N/A

### TDG

<b>Proper Shipping Name:</b>	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID
<b>Technical Name:</b>	N/A
<b>Hazard Class:</b>	Not D.O.T. Regulated
<b>UN/NA#:</b>	N/A
<b>Packing Group:</b>	N/A

### ICAO

<b>Proper Shipping Name:</b>	COMPOUND, INDUSTRIAL WATER TREATMENT, LIQUID
<b>Technical Name:</b>	N/A
<b>Hazard Class:</b>	Not D.O.T. Regulated
<b>UN/NA#:</b>	N/A
<b>Packing Group:</b>	N/A

## 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
1-Hydroxyethylidene-1,1-diphosphonic acid, tetrapotassium salt	N/A	N/A	N/A

**Comments:** None.

### State Regulations

**California Proposition 65:** None known.

### Special Regulations

Component	States
1-Hydroxyethylidene-1,1-diphosphonic acid, tetrapotassium salt	None

### International Regulations

**Canada****WHMIS Classification:** N/A**Controlled Product Regulations (CPR):** N/A

## ***Section 16. Other Information***

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**HMIS Hazard Rating**

<b>Health:</b>	1
<b>Flammability:</b>	0
<b>Physical Hazard:</b>	0
<b>PPE:</b>	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/USDA/GRAS:** All ingredients in this product are authorized in 21 CFR 173.310 for use as "Boiler Water Additives" where the steam may contact food.**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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