



MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name: Product Use: Manufacturer's Name: Emergency Telephone Number: Address (Corporate Headquarters): Telephone Number for Information: Date of MSDS:		ChemTreat CL4900 Cooling Water Microbiocide ChemTreat, Inc. (800) 424–9300 4461 Cox Road Glen Allen, VA 23060 (800) 648–4579 June 5, 2008	
Section 2. Hazard(s) 1	dentification	ļ	
Signal Word:	DANGER!		\vee \vee
Hazard Statement(s):	Causes severe skin burns and eye damage. Causes serious eye damage. May be 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.%
Stabilized bromine chloride in solution	13863-41-7	15

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. 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:	Probable mucosal damage may contraindicate the use of gastric lavage.
Additional First Aid Remarks:	Have the product container, label or MSDS with you when calling a poison control center or doctor, or when going for treatment.

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 Protection 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. Keep from freezing.





Section 8. Exposure Controls/Personal Protection

Exposure Limits

Component	Source	Exposure Limits
Stabilized bromine chloride in solution		N/E

Carcinogenicity Category

Component		Source	Code	Brief Description		
Stabilized bromine chloride in solution				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:	Wear b replace	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:	cartridg	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:	1.4720
pH:	13.9
Freezing Point:	30°F
Flash Point:	N/D
Odor:	Mild
Melting Point: Boiling Point: Solubility in Water: Evaporation Rate: Vapor Density: Molecular Weight: Viscosity:	N/A 223°F Miscible N/D N/D <100
Flammable Limits:	N/A
Autoignition Temperature:	N/A
Density:	12.20 lb/ga
Vapor Pressure:	N/D





% VOC

0

Section 10. Stability and Reactivity

Chemical Stability:	Stable at normal temperatures and pressures.
Incompatibility with Various Substances:	Acids, Strong oxidizers, Reducing agents, Aluminum/aluminum alloys, Copper/copper alloys, Iron
Hazardous Decomposition Products:	Bromine, Chlorine
Possibility of Hazardous Reactions:	None known.

Section 11. Toxicological Information

Chemical Name	Exposure	Type of Effect	Concentration	Species
N/D				

Comments:

None.

Section 12. Ecological Information

Species	Duration	Type of Effect	Test Results
N/D			

Comments:

Not tested.

Section 13. Disposal Considerations

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

EPA corrosivity characteristic hazardous waste D002 when disposed of in the original product form.





Section 14. Transport Information

DOT Classification

DOT Name: Technical Name: Hazard Class: UN/NA#: Packing Group: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (HALOGENATED COMPLEX, SODIUM HYDROXIDE) Corrosive UN3266 PGIII

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

		Section 302 EHS TPQ	CERCLA RQ
Stabilized bromine chloride in solution	N/A	N/A	N/A

State Regulations

California Proposition 65: None known.

Special Regulations

Component	States
Stabilized bromine chloride in solution	None





International Regulations

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

Section 16. Other Information

HMIS Hazard Rating

Health: Flammability: Physical Hazard: PPE:	3 0 0 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 has not been evaluated for Kosher approval.
FIFRA:	This product is an EPA registered biocide. 3377–79–15300
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

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