

Product CT-I600P
 Revision Date 08/10/2016
 Revision 2



Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name	CT-I600P
Identifier Uses	Cooling Water Treatment
Supplier	Clear Water Technologies, LLC 13560 Colombard Court Fontana, California 92337 Tel: 951-681-9697
Website	info@clearwatertech.com
Emergency Telephone	24-HOUR EMERGENCY TELEPHONE: INFOTRAC: 1-800-535-5053 INTERNATIONAL#: 1-352-323-3500

SECTION 2: HAZARDS IDENTIFICATION

Appearance	Dark amber liquid.
Color	Dark amber liquid.
Odor	Sweet Aromatic.

Pictogram(s)



Signal Word	Danger
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Hazard Statements	H314 Causes severe skin burns and eye damage
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Precautionary Statements	P280 Wear protective gloves/ protective clothing/eye protection/face protection. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor/physician
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Contains	sodium hydroxide sodium 4(or 5)-methyl-1H-benzotriazole phosphonic acid
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GHS Classification	
Physical and Chemical Hazards	Not classified
Human Health	Skin Corr. 1A - H314
Environment	Not classified

OSHA Regulatory Status	This product is Hazardous under the OSHA Hazard communication Standard.
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Inhalation	Inhalation of vapors or fumes may be irritating to mucous membranes and respiratory tract. Avoid contact.
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Ingestion	Exposure to liquid product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract. Do NOT ingest.
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Skin contact	Exposure to liquid product may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.
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Eye contact	Exposure to liquid product may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.
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Routes of Exposure	No Information available.
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SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**Composition Comments**

Confidential business information has been removed without affecting the overall safety information on the safety data sheet.

SECTION 4: FIRST AID MEASURESDescription of first aid measures**General Information**

General first aid, rest, warmth and fresh air.

Inhalation

If this product is inhaled and symptoms occur, move the exposed person to fresh air promptly. Seek medical attention if symptoms persist. Give artificial respiration if the exposed person is not breathing.

Ingestion

If this product is ingested, drink small amounts of water and seek medical attention promptly. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Skin contact

If this product contacts the skin, immediately flush the affected area with plenty of clean running water for at least fifteen (15) minutes. If the product penetrates the clothing, promptly remove the contaminated clothing or shoes, and flush the affected area as described.

Eye contact

Do not rub eye. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse. Continue to rinse for at least 15 minutes.

Most important symptoms and effects, both acute and delayed**General Information**

The severity of the symptoms described will vary dependent of the concentration and the length of exposure.

Inhalation

Inhalation of vapors or fumes may be irritating to mucous membranes and respiratory tract. Avoid contact.

Ingestion

Exposure to liquid product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract. Do NOT ingest.

Skin contact

Exposure to liquid product may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.

Eye contact

Exposure to liquid product may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.

Routes of Exposure

No Information available.

Most important symptoms and effects, both acute and delayed**Notes to the Physician**

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES**Auto Ignition Temperature (°C)**

No Information available.

Flammability Limit-Lower (%)

No Information available.

Flammability Limit- Upper (%)

No Information available.

Flashpoint

No Information available.

Extinguishing Media

Use water, foam, dry chemical or carbon dioxide to extinguish fire.

Hazardous combustion products

No hazardous decomposition products.

Unusual Fire & Explosion Hazards

Dried residue can thermally decompose, giving off irritating and possibly toxic fumes.

Special Fire Fighting Procedures

Ventilate closed spaces before entering them. Water spray should be used to cool containers.

Protective equipment for fire-fighters

Fire fighters should wear full protective equipment, including a self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES**Personal Precautions**

Use proper personal protection (refer to Section 8).

Environmental Precautions

Do not discharge into drains, water courses or onto the ground.

Spill Clean Up Methods

Safely stop source of spill. Clean up spills immediately. Restrict non-essential personnel from the area. Wear protective clothing, goggles and respirator if ventilation is not adequate. Dike spill area and soak up material with sand or other absorbent. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Wash thoroughly after dealing with a spillage.

SECTION 7: HANDLING AND STORAGE

Handling	Avoid inhalation of vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse container before disposal. Do not use contact lenses. Eliminate all sources of ignition. Use proper personal protection when handling (refer to Section 8).
Usage Description	Use only according to directions.
Storage Precautions	Store in original tightly closed container. Store in a well-ventilated place. Store in a covered, dry, climate controlled area, away from incompatibles. Keep away from oxidizing agents and strong acids. The recommended shelf life is two (2) years. It is recommended that products be retested if stored for more than two (2) years. Under ideal storage conditions, the shelf life is almost indefinite. The recommended storage temperature is above 32°F, preferably at room temperature (70°F).
Specific End Use(s)	The identified uses are in section I of this Safety Data Sheet.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**Protective Equipment**

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
sodium hydroxide	OSHA		2mg/m3			

Ingredient Comments OSHA

Process Conditions	Provide eyewash, quick drench.
Engineering Measures	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
Respiratory Equipment	Use of respirator protection is not generally required. However, if exposure is above the stated limits or ventilation is inadequate, use a NIOSH approved acid gas/organic vapor respirator to reduce potential for inhalation exposure. When using respirator cartridges, they must be changed frequently to assure breakthrough exposure does not occur.
Hand Protection	Use rubber or plastic gloves to minimize skin contact.
Eye Protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hygiene Measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Appearance	Dark amber liquid.
Color	Dark amber liquid.
Odor	Sweet aromatic
Odor Threshold -Lower	No Information available.
Odor Threshold - Upper	No Information available.
pH-Value, Conc. Solution	13.18
Melting point	32.0 °F
Initial boiling point and boiling range	212.0 °F

Flashpoint	No Information available.
Evaporation rate	No Information available.
Flammability State	No Information available.
Flammability Limit-Lower (%)	No Information available.
Flammability Limit- Upper (%)	No Information available.
Vapor pressure	23.8 mm Hg 0.0
Vapor Density (air=1)	No Information available.
Relative density	10.70 @ 68.0 °F
Bulk Density	No Information available.
Solubility	Completely soluble in water.
Decomposition temperature	No Information available.
Partition coefficient; n-octanol/water	No Information available.
Auto Ignition Temperature (°C)	No Information available.
Viscosity	No Information available.
Explosive Properties	No information available.
Oxidizing Properties	No Information available.
Molecular Weight	No Information available.
Volatile Organic Compound	No Information available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Reactions may occur with strong oxidizing materials and strong acids.
Stability	Stable under normal temperature conditions and recommended use.
Hazardous Polymerization	Hazardous polymerization is not expected to occur under normal temperatures and pressures.
Hazardous Decomposition Products	None under normal conditions.
Conditions to Avoid	Keep away from heat.
Materials to Avoid	Keep away from strong oxidizing materials and strong acids.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Information

Acute Toxicity (Oral LD50)	>2638.00mg/kg Rat
Acute Toxicity (Dermal LD50)	>1026.00mg/kg Rabbit
Acute Toxicity (Inhalation LC50)	~5500.00mg/l (vapors) Rabbit
Skin Corrosion/Irritation	No Information available.
Respiratory Sensitization	No Information available.
Skin Sensitization	No Information available.
Reproductive Toxicity:	No Information available.
Germ Cell Mutagenicity:	
Genotoxicity - In Vitro	
Genotoxicity - In Vivo	

Carcinogenicity:**Carcinogenicity**

No Information available.

NTP - Carcinogenicity

The product and its components are not listed.

OSHA - Carcinogenicity

The product and its components are not listed.

IARC Carcinogenicity

The product and its components are not listed.

Specific Target Organ Toxicity - Single Exposure:**STOT - Single Exposure**

No Information available.

Specific Target Organ Toxicity - Repeated Exposure:**STOT - Repeated Exposure**

No Information available.

Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
sodium hydroxide		1350mg/kg Rabbit	
sodium chloride	3g/kg Rat	10g/kg Rabbit	42g/m3 Rat 1 Hours
sodium 4(or 5)-methyl-1H-benzotriazole	920mg/kg		

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity****Acute Toxicity - Fish**

LC50 96 Hours >6900.00ppm Onchorhynchus mykiss (Rainbow Trout)

Acute Toxicity -

LC50 48 Hours >3500.00ppm Daphnia magna

Aquatic Invertebrates**Acute Toxicity - Aquatic Plants**

EC50 72 Hours >5900.00ppm

Degradability

No information available.

Bioaccumulative Potential**Mobility**

Completely soluble in water.

Results of PBT and vPvB Assessment The product does not contain any PBT or vPvB substances.**Other Adverse Effects**

None known.

Name	Acute Toxicity (Fish)	Acute Toxicity (Aquatic Invertebrates)	Acute Toxicity (Aquatic)
sodium hydroxide		EC50 100.00ppm Daphnia magna	
sodium 4(or 5)-methyl-1H-benzotriazole	LC50 96 Hours 191.20mg/l Lepomis macrochirus (Bluegill) LC50 96 Hours 23.70 Onchorhynchus mykiss (Rainbow Trout)	LC50 48 Hours 245.70mg/l Daphnia magna	

SECTION 13: DISPOSAL CONSIDERATIONS**Waste Management**

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Disposal Methods

Do NOT dump into any sewers, on the ground or into any body of water. Rinse containers before disposal. Since emptied containers contain product residue, follow label warnings even after container is emptied. Dispose in accordance with all applicable federal, state and local laws and regulations.

SECTION 14: TRANSPORT INFORMATION**UN No. (DOT/TDG)**


1760 - CORROSIVE LIQUID, (Sodium Hydroxide)

UN No. (IMDG)

1760 - CORROSIVE LIQUID, (Sodium Hydroxide)

UN No. (ICAO)

1760 - Corrosive liquid (Sodium Hydroxide)

DOT Proper Shipping Name	1760 - CORROSIVE LIQUID, (Sodium Hydroxide)
TDG Proper Shipping Name	1760 - CORROSIVE LIQUID, (Sodium Hydroxide)
DOT Hazard Class	8
DOT Hazard Label	Class 8 - Corrosive
TDG Class	8
TDG Label(s)	8
IMDG Class	8
ICAO Class	8
Transport Labels	
DOT Pack Group	II
IMDG Pack Group	II
Air Pack Group	II
EMS	F-A, S-B
Environmentally Hazardous Substance/Marine Pollutant	No

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The Following ingredients are listed None Listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The Following ingredients are listed sodium hydroxide

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

The Following ingredients are listed None Listed.

SARA 313 Emission Reporting

The Following ingredients are listed None Listed.

CAA Accidental Release Prevention

The Following ingredients are listed None Listed.

OSHA Highly Hazardous Chemicals

The Following ingredients are listed None Listed.

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins

The Following ingredients are listed None Listed.

California Air Toxics "Hot Spots" (A-I)

The Following ingredients are listed sodium hydroxide

California Air Toxics "Hot Spots" (A-II)

The Following ingredients are listed None Listed.

Massachusetts "Right To Know" List

The Following ingredients are listed sodium hydroxide

Rhode Island "Right To Know" List

The Following ingredients are listed sodium hydroxide

Minnesota "Right To Know" List

The Following ingredients are listed sodium hydroxide

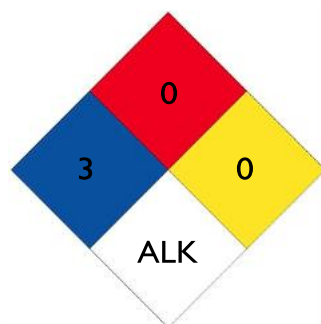
New Jersey "Right To Know" List

The Following ingredients are listed sodium hydroxide
 phosphonic acid

Pennsylvania "Right To Know" List

The Following ingredients are listed sodium hydroxide
 phosphonic acid

SECTION 16: OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)**HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)**

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	C

Revision Comments

Revision Date 08/10/2016

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Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.