Product	BT-4300
Revision Date	5/15/2015
Revision	1

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name	BT-4300
Identifier Uses	Boiler Treatment
Supplier	Clear Water Technologies, LLC 13560 Colombard Court Fontana, California 92337 Tel: 844.429.8324
Contact Person	info@clearwatertech.com
Emergency Telephone	24-HOUR EMERGENCY TELEPHONE: INFOTRAC: 1-800-535-5053 INTERNATIONAL#: 1-352-323-3500

SECTION 2: HAZARDS IDENTIFICATION

Appearance	Liquid
Color	Clear, amber liquid
Odor	Ammonia-like
Pictogram(s)	
Signal Word	Danger
Hazard Statements	H314 Causes severe skin burns and eye damage H303 May be harmful if swallowed
Precautionary Statements	P280 Wear protective gloves/ protective clothing/eye protection/face protection. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 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
Contains	potassium hydroxide etidronic acid phosphonic acid 2-diethylaminoethanol N,N-diethylethanolamine
GHS Classification	
Physical and Chemical Hazards	Not classified
Human Health	Skin Corr. 1A - H314, Acute Tox 5 - H303
Environment	Not classified
OSHA Regulatory Status	This product is Hazardous under the OSHA Hazard communication Standard.
Inhalation	Harmful if inhaled.
Ingestion	Harmful if swallowed. May cause stomach pain or vomiting.
Skin contact	Corrosive! Can cause redness, pain, and severe skin burns.
Eye contact	Causes severe eye burns.
Routes of Exposure	Unknown

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 MEASURES

Description of first aid measures

General Information	General first aid, rest, warmth and fresh air.
Inhalation	If this product is inhaled, move the exposed person to fresh air promptly.
Ingestion	If the product is ingested, seek medical attention immediately. Do NOT give the exposed person anything to drink. Never give anything by mouth to an unconscious person. Rinse mouth thoroughly.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.
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	Harmful if inhaled.
Ingestion	Harmful if swallowed. May cause stomach pain or vomiting.
Skin contact	Corrosive! Can cause redness, pain, and severe skin burns.
Eye contact	Causes severe eye burns.
Routes of Exposure	Unknown

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.
Flash point	No Information available.
Extinguishing Media	Use fire-extinguishing media appropriate for surrounding materials. Water, foam, dry chemical or carbon dioxide.
Hazardous combustion products	Combustion may lead to the release of oxides of phosphines, carbon monoxide, carbon dioxide, nitrogen oxide.
Unusual Fire & Explosion Hazards	Dried residue can thermally decompose, giving off irritating and possibly toxic fumes.
Special Fire Fighting Procedures	Use water to cool containers exposed to a fire.
Protective equipment for fire-fighters	Wear full protective clothing and self- contained breathing apparatus, suitable gloves and boots.

SECTION 6: Accidental Release Measures

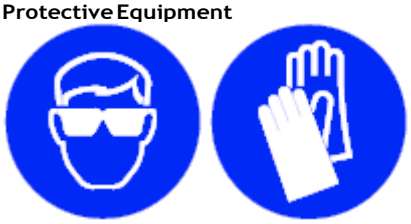
Personal Precautions	For personal protection, see section 8. In case of inadequate ventilation, use respiratory protection. Do not smoke, use open fire or other sources of ignition. In case of spills, beware of slippery floors and surfaces.
Environmental Precautions	Keep out of drains, municipal sewers, open bodies of water and water course.
Spill Clean Up Methods	Restrict non-essential personnel from the area. Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer. Place into chemical waste container for disposal according to local, state or federal regulations. Neutralize residue with lime or soda ash and flush spill area. DO NOT TOUCH SPILLED MATERIAL! Wash thoroughly after dealing with a spillage.

SECTION 7: Handling and Storage

Handling	Use proper personal protection when handling. Provide good ventilation. Avoid contact with skin and eyes and clothing. Do not use contact lenses. Avoid inhalation of vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse container before disposal.
Usage Description	Store in a cool, dry, and well-ventilated place away from incompatible materials. Vent containers frequently, and more often in warm weather to relieve pressure. Keep container tightly closed when not in use. Do not get in eyes, on skin, or on clothing.
Storage Precautions	Store closed containers in a cool, dry, well-ventilated area away from incompatible materials. This product is stable under normal conditions of handling and storage. Avoid cold temperatures. The recommended storage temperature is above 32°F, preferably at room temperature (70°F).Keep away from oxides of phosphines, carbon monoxide, carbon dioxide, nitrogen oxide.
Specific End Use(s)	The identified uses are in section 1 of this Safety Data Sheet.

SECTION 8: Exposure Controls/Personal Protection

Protective Equipment



Ingredient Comments	No information for the control parameters
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	To avoid contact with eyes, use safety glasses or chemical splash goggles. Face shield is recommended. Eye wash station should be available in the work area.
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	Liquid
Color	Clear, amber liquid
Odor	Ammonia-like
Odor Threshold - Lower	No Information available.
Odor Threshold - Upper	No Information available.
pH-Value, Conc. Solution	14.0
Melting point	32.0 °F
Initial boiling point and boiling range	212.0 °F
Flash point	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	No Information available.
Vapor density (air=1)	No Information available
Relative density	1.163 @ 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 agents, alkalis and amines.
Stability	This product is stable at ambient temperatures and atmospheric pressures.
Hazardous Polymerization	Hazardous polymerization is not expected to occur under normal temperatures and pressures.
Hazardous Decomposition Products	Hazardous combustion results in oxides of phosphines, carbon monoxide, carbon dioxide, nitrogen oxide.
Conditions to Avoid	Avoid exposing to heat and contact with strong oxidizing substances.
Materials to Avoid	Do not mix with other chemicals unless listed on directions. Keep away from strong oxidizing materials and strong acids.

SECTION 11: Toxicological Information

Toxicological Information

Acute Toxicity (Oral LD50)	>1669.00mg/kg Rat
Acute Toxicity (Dermal LD50)	>1354.00mg/kg Rabbit
Acute Toxicity (Inhalation LC50)	Not determined.
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
potassium hydroxide	284mg/kg Rat		

SECTION 12: Ecological Information

Eco toxicity No Information available

Acute Toxicity - Fish LC50 96 Hours >5220.00ppm Onchorhynchus mykiss (Rainbow trout)
Acute Toxicity - Aquatic Invertebrates LC50 48 Hours >6750.00ppm Daphnia magna

Acute Toxicity - Aquatic Plants EC50 72 Hours >1980.00ppm
Degradability No information available

Bio accumulative Potential No Information available

Mobility No Information available

Results of PBT and vPvB Assessment The product does not contain any PBT or vPvB Substances.

Other Adverse Effects None known.

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 Dispose of waste and residues in accordance with local authority requirements. 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, (Potassium Hydroxide)

UN No. (IMDG) 1760 - CORROSIVE LIQUID, (Potassium Hydroxide)

UN No. (ICAO) 1760 - Corrosive liquid (Potassium Hydroxide)

DOT Proper Shipping Name 1760 - CORROSIVE LIQUID, (Potassium Hydroxide)

TDG Proper Shipping Name 1760 - CORROSIVE LIQUID, (Potassium 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

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
The Following ingredients are listed potassium hydroxide

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
The Following ingredients are listed

SARA 313 Emission Reporting
The Following ingredients are listed

CAA Accidental Release Prevention
The Following ingredients are listed

OSHA Highly Hazardous Chemicals
The Following ingredients are listed

US State Regulations

California Proposition 65 Carcinogens and Reproductive Toxins
The Following ingredients are listed

California Air Toxics "Hot Spots" (A-I)
The Following ingredients are listed

California Air Toxics "Hot Spots" (A-Ii)
The Following ingredients are listed

Massachusetts "Right To Know" List
The Following ingredients are listed potassium hydroxide
2-diethylaminoethanol N,N-diethylethanolamine

Rhode Island "Right To Know" List
The Following ingredients are listed potassium hydroxide

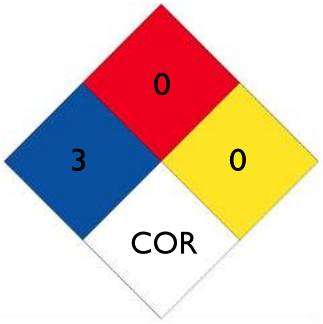
Minnesota "Right To Know" List
The Following ingredients are listed potassium hydroxide
2-diethylaminoethanol N,N-diethylethanolamine

New Jersey "Right To Know" List
The Following ingredients are listed potassium hydroxide
phosphonic acid
2-diethylaminoethanol N,N-diethylethanolamine

Pennsylvania "Right To Know" List
The Following ingredients are listed potassium hydroxide
phosphonic acid
2-diethylaminoethanol N,N-diethylethanolamine

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 5/15/2015
Revision 1

Disclaimer
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