Product LT-2400P Revision Date 08/25/2016

Revision I



Safety Data Sheet

SECTION I: IDENTIFICATION

Product Name LT-2400P

Identifier Uses Closed Loop Treatment.

Supplier Clear Water Technologies, LLC

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Contact Person <u>info@clearwatertech.com</u>

Emergency Telephone 24-HOUR EMERGENCY TELEPHONE: INFOTRAC: I-800-535-5053 INTERNATIONAL#: I-

352-323-3500

SECTION 2: HAZARDS IDENTIFICATION

Appearance Liquid.

Color Clear, pale yellow liquid.

Odorless.

Pictogram(s)



Signal Word Danger

Hazard Statements H314 Causes severe skin burns and eye damage

H361 Suspected of damaging fertility or the unborn child [*]. H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements P273 Avoid release to the environment.

 $P280\,Wear\,protective\,gloves/\,protective\,clothing/eye\,protection/face\,protection.$

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

 $P304 + P340 \,IF \,INHALED: \,Remove \,victim \,to \,fresh \,air \,and \,keep \,at \,rest \,in \,a \,position$

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.

P308 + P313 IF exposed or concerned: Get medical advice/ attention. P310 Immediately call a POISON CENTER or doctor/physician

Contains sodium hydroxide

 $sodium\ 4 (or\ 5) - methyl-I\,H-benzotriazolide$

BORIC ACID (HBO2), SODIUM SALT, TETRAHYDRATE SODIUM METABORATE

TETRAHYDRATE sodium oxido(oxo)borane

GHS Classification

Physical and Chemical Hazards Not classified

Human Health Skin Corr. IB - H314, Repr. 2 - H361,

Environment Aquatic Chronic 3 - H412

OSHA Regulatory Status This product is Hazardous under the OSHA Hazard communication Standard.

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, and possible burns. Do NOT ingest.

Skin contact Exposure to liquid product may cause moderate to severe irritation to skin, and possible burns. Symptoms of exposure may include redness, itching, swelling or pain. Avoid 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.

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 and symptoms occur, move the exposed person to fresh air

 $promptly. Seek \, medical \, attention \, if \, symptoms \, persist.$

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 soap and 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. Seek medical

attention if irritation persists.

Eye contact If this product contacts the eyes, immediately flush eyes with plenty of clean running water

for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Remove

contact lenses if worn. Seek medical attention if irritation persists.

Most important symptoms and effects, both acute and delayed

General Information No information available

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, and possible burns. Do NOT ingest.

Skin contact Exposure to liquid product may cause moderate to severe irritation to skin, and possible

burns. Symptoms of exposure may include redness, itching, swelling or pain. Avoid 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)
Flammability Limit - Lower (%)
Flammability Limit - Upper (%)
Flash point

No Information available.
No Information available.
No Information available.

Hazardous combustion products
Unusual Fire & Explosion Hazards
Special Fire Fighting Procedures

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
Fire fighters should wear full protective equipment for fire-

Unknown.

fighters

Fire fighters should wear full protective equipment, and have self-contained breathing

apparatus available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions Use proper personal protection (refer to Section 8).

Environmental Precautions Run off from fire control or dilution water may cause pollution. Keep out of drains, municipal

sewers, open bodies of water and water course.

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. Soak up spills with sand or other absorbent, squeegee and collect or vacuum the spillage.

Place into containers for reuse or disposal. Dispose according to local, state or

federal regulations at an approved chemical waste reprocessing facility. Flush spill area with

large amounts of water.

SECTION 7: HANDLING AND STORAGE

Handling Use proper personal protection when handling (refer to Section 8).

Usage Description Use only according to directions.

Storage Precautions Keep container tightly closed. Do not sore in heat or direct sunlight. Keep in dry, cool, and

well ventilated place. The recommended storage temperature is 34°F to 129°F, preferably at room temperature 70°F the recommended storage temperature is above 32°F, preferably at

room temperature (70°F).

Specific End Use(s) The identified uses are in section 1 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 Keep container tightly sealed when not in use. Provide eyewash, quick drench.

Engineering Measures General mechanical ventilation is recommended for enclosed areas.

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 ProtectionTo avoid contact with eyes, use chemical splash goggles and a face shield. Eye wash station

should be available in the work area.

Hygiene MeasuresDO 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: PHSYICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Appearance Liquid.

Color Clear, pale yellow liquid.

Odorless.

Odor Threshold -Lower No Information available.

Odor Threshold - Upper No Information available.

pH-Value, Conc. Solution 12.3

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 23.80 mm Hg 0.00

Vapor Density (air=1) No Information available.

Relative density 1.22 @ 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 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 Unknown.

Conditions to Avoid Avoid contact with strong oxidizing materials and strong acids.

Materials to Avoid Keep away from strong oxidizing materials and strong acids.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Information No Information available.

Acute Toxicity (Oral LD50) >1642.00mg/kg Rat
Acute Toxicity (Dermal LD50) >791.00mg/kg Rabbit
Acute Toxicity (Inhalation LC50) No Information available.

Skin Corrosion/Irritation No Information available.

Respiratory Sensitization
Skin Sensitization
No Information available.
No Information available.
No Information available.
No Information available.
Germ Cell Mutagenicity:
Genotoxicity - In Vitro

Carcinogenicity:

Genotoxicity - In Vivo

Carcinogenicity No Information available.

NTP - Carcinogenicity

OSHA - Carcinogenicity

IARC Carcinogenicity

The product and its components are not listed.
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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		I 350mg/kg Rabbit	
sodium chloride	3g/kg Rat	10g/kg Rabbit	42g/m3 Rat I Hours
sodium 4(or 5)-methyl-1H-benzotriazolide	920mg/kg		
BORIC ACID (HBO2), SODIUM SALT, TETRAHYDRATE SODIUM METABORATE TETRAHYDRATE sodium oxido(oxo)borane	2330mg/kg Rat		

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity No Information available.

Acute Toxicity - Fish LC50 96 Hours > 1380.00ppm Onchorhynchus mykiss (Rainbow Trout)

Acute Toxicity - LC50 48 Hours > 1260.00ppm Daphnia magna

Aquatic Invertebrates

Acute Toxicity - Aquatic Plants EC50 72 Hours > 225.00ppm

Degradability No information available.

Bioaccumulative Potential

Mobility Completely soluble in water.

 $\textbf{Results of PBT and vPvB Assessment} \ \ \textbf{The product does not contain any PBT or vPvB substances}.$

Other Adverse Effects None known.

Name	Acute I oxicity (Fish)	Acute Toxicity (Aquatic	Acute Toxicity (Aquatic
sodium hydroxide		EC50 100.00ppm Daphnia magna	
sodium 4(or 5)-methyl-1H-benzotriazolide	LC50 96 Hours 191.20mg/ILepomis macrochirus (Bluegill)LC50 96 Hours 23.70 Onchorhynchus mykiss (Rainbow Trout)	LC50 48 Hours 245.70mg/I 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 PackGroup ||

IMDG Pack Group ||

Air Pack Group ||

EMS F-A, S-B

Environmentally Hazardous

Substance/Marine Pollutant

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)

Yes

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 sodium hydroxide

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

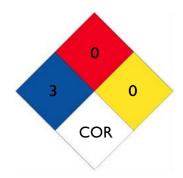
The Following ingredients are listed sodium hydroxide

Pennsylvania "Right To Know" List

The Following ingredients are listed sodium hydroxide

SECTION 16: OTHER INFORMATION

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	D

Revision Comments

Revision Date 07/09/2015

Revision

Disclaimer

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