Product BT-4630

Revision Date 06/12/2015

Revision |



## **Safety Data Sheet**

## **SECTION I: IDENTIFICATION**

Product Name BT-4630

Identifier Uses Condensate Treatment

Supplier Clear Water Technologies, LLC

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Contact Person info@cheminc.com

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

352-323-3500

## **SECTION 2: HAZARDS IDENTIFICATION**

 Appearance
 Clear, colorless to yellow liquid.

 Color
 Clear, colorless to yellow liquid.

Odor Ammonia-like.

Pictogram(s)



Signal Word Danger

Hazard Statements H303 May be harmful if swallowed

 $\ensuremath{\mathsf{H314}}$  Causes severe skin burns and eye damage

H361 Suspected of damaging fertility or the unborn child.

Precautionary Statements P202 Do not handle until all safety precautions have been read and understood.

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 2-diethylaminoethanol N,N-diethylethanolamine

morpholine cyclohexylamine

**GHS** Classification

Physical and Chemical Hazards Not class

Human Health Environment

Not classified Acute Tox 5 - H303, Acute Tox 5 - H313, Skin Corr. IB - H314, Repr. 2 - H361

Not classified

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

**Inhalation** Inhalation of vapors or fumes may cause minor respiratory irritation.

Ingestion Harmful if swallowed.

**Skin contact** Exposure to liquid product causes severe irritation to skin, and burns. Symptoms of exposure

may include redness, itching, swelling or pain.

Exposure to liquid product may cause severe irritation to eyes, and possibly burns or eye

damage. Symptoms of exposure may include redness, itching, swelling, tearing or pain.

Effects of contact may be delayed. Avoid contact.

**Routes of Exposure** No Information available.

### **SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Confidential business information has been removed without affecting the overall safety **Composition Comments** 

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. Seek medical

attention if symptoms persist.

Ingestion If this product is ingested, seek medical attention immediately. Do NOT give the exposed

person anything to drink. Do NOT induce vomiting unless directed to do so by medical

personnel. Never give anything by mouth to an unconscious person.

**S**kin 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 Inhalation of vapors or fumes may cause minor respiratory irritation.

Ingestion Harmful if swallowed.

Skincontact Exposure to liquid product causes severe irritation to skin, and burns. Symptoms of exposure

may include redness, itching, swelling or pain.

Eye contact Exposure to liquid product may cause severe irritation to eyes, and possibly burns or eye

damage. Symptoms of exposure may include redness, itching, swelling, tearing or pain.

Effects of contact may be delayed. Avoid contact.

**Routes of Exposure** No Information available.

Most important symptoms and effects, both acute and delayed

Notes to the Physician There is no specific antidote. Treatment of overexposure should be directed at the control of

symptoms and the clinical condition of the patient.

## **SECTION 5: FIREFIGHTING MEASURES**

No Information available. Auto Ignition Temperature (°C) Flammability Limit - Lower (%) No Information available. Flammability Limit - Upper (%) No Information available.

> 141.0 °F Flash point

**Extinguishing Media** Water spray may be ineffective. Use alcohol foam, dry chemical, carbon dioxide, sand or

> limestone to extinguish fire. Combustion may lead to the release of carbon monoxide, oxides of nitrogen and ammonia.

**Hazardous combustion products** Unusual Fire & Explosion Hazards Irritating vapors may be emitted during a fire.

**Special Fire Fighting Procedures** Use water to cool containers exposed to a fire.

Protective equipment for fire-Fire fighters should wear full protective equipment, including butyl rubber boots, gloves, body suit and self-contained breathing apparatus. fighters

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal Precautions Use proper personal protection (refer to Section 8). Shut off or remove all sources of ignition.

Use caution as spills of this product are very slippery.

**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. Dike spill area and soak up material with dry soil, sand or other absorbent. Place into chemical waste container for disposal according to local, state or federal regulations at an approved chemical waste reprocessing facility. Flush spill area with detergent and water. Do NOT flush into sewer or storm drain.

### **SECTION 7: HANDLING AND STORAGE**

Handling Use proper personal protection when handling (refer to Section 8). Use under well-ventilated

conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse

container before disposal.

**Usage Description** Use only according to directions.

Storage Precautions 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). Keep away from strong oxidizing agents, acids, copper, aluminum and

zinc.

**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
2-diethylaminoethanol N,N- diethylethanolamine	OSHA	10ррт	50mg/m3		
morpholine	OSHA	20ppm	70mg/m3		

Ingredient Comments OSHA

**Process Conditions** Keep container tightly sealed when not in use. 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 a NIOSH approved 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 neoprene, butyl or nitrile rubber gloves to minimize skin contact.

Eye Protection To avoid contact with eyes, use chemical splash goggles and a face shield. 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 Clear, colorless to yellow liquid.
Color Clear, colorless to yellow liquid.

**Odor** Ammonia-like.

Odor Threshold - Lower No Information available.

Odor Threshold - Upper No Information available.

pH-Value, Conc. Solution 12.4

Melting point 25.0 °F

Initial boiling point and boiling

range

210.0 °F

Flashpoint > 141.0 °F

**Evaporation rate** No Information available.

Flammability State No Information available.

Flammability Limit-Lower (%) No Information available.

Flammability Limit-Upper (%) No Information available.

**Vapor pressure** 7.0 mm Hg 0.0

Vapor Density (air=1) No Information available.

Relative density 0.99 @ 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, strong acids, copper, aluminum and zinc.

**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 Carbon monoxide, oxides of nitrogen and ammonia.

Conditions to Avoid Avoid exposing to contact with Strong oxidizing agents, strong acids, copper, aluminum, and

zinc.

Materials to Avoid Keep away from Strong oxidizing agents, strong acids, copper, aluminum and zinc.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Toxicological Information

Acute Toxicity (Oral LD50) >714.00mg/kg Rat
Acute Toxicity (Dermal LD50) >302.00mg/kg Rabbit

Acute Toxicity (Inhalation LC50) No Information available.

Skin Corrosion/Irritation No Information available.

Respiratory Sensitization
Skin Sensitization
Reproductive Toxicity:
No Information available.
No Information available.
No Information available.
Serm Cell Mutagenicity:
Genotoxicity - In Vitro

**Carcinogenicity:** 

Genotoxicity - In Vivo

**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 morpholine: 3 IARC Group 3 Not classifiable as to its carcinogenicity to humans.

**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
morpholine	1050mg/kg Rat	I 2 I 0mg/kg Rabbit	>22.2mg/l (vapours) Rat I Hours
cyclohexylamine	432mg/kg-1 Rat	275mg/kg-1 Rat	>700mg/m-3 Rat 4Hours

## **SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude

the possibility that large or frequent spills can have a harmful or damaging effect on the

environment.

Acute Toxicity - Fish LC50 96 Hours >2130.00ppm Onchorhynchus mykiss (Rainbow Trout)

Acute Toxicity - LC50 48 Hours >235.00ppm Daphnia magna Aquatic Invertebrates

Acute Toxicity - Aquatic Plants EC50 72 Hours > 1990.00ppm

**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 AdverseEffects None known.

Name Acute Toxicity (Fish)		Acute Toxicity (Aquatic Invertebrates)	Acute Toxicity (Aquatic Plants)	
morpholine	LC50 96 Hours 400.00mg/l			
cyclohexylamine LC50 =1	LC50 = 19.00mg/l	IFC 50 48 Hours = 36.30mg/HDaphnia magna	EC50 72 Hours =29.30mg/I Selenastrum	
	LC30 =17.00mg/1		Capricornutum	

## **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. Do NOT reuse empty containers. Dispose in accordance with

all applicable federal, state and local laws and regulations.

### **SECTION 14: TRANSPORT INFORMATION**

**UN No. (DOT/TDG)** 3267-CORROSIVELIQUID, BASIC, ORGANIC, (Cyclohexylamine & Morpholine)

**UN No. (IMDG)** 3267-CORROSIVELIQUID, BASIC, ORGANIC, (Cyclohexylamine&Morpholine)

**UN No. (ICAO)** 3267 - Corrosive liquid, basic, organic (Cyclohexylamine & Morpholine)

**DOT Proper Shipping Name** 3267-CORROSIVELIQUID, BASIC, ORGANIC, (Cyclohexylamine & Morpholine)

**TDG Proper Shipping Name** 3267-CORROSIVELIQUID, BASIC, ORGANIC, (Cyclohexylamine & Morpholine)

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 II

**EMS** F-A, S-B

Environmentally Hazardous Substance/Marine Pollutant

Nο

## **SECTION 15: REGULATORY INFORMATION**

### US Federal Regulations

### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The Following ingredients are listed cyclohexylamine

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

The Following ingredients are listed morpholine

## SARA Extremely Hazardous Substances EPCRA Reportable Quantities

The Following ingredients are listed morpholine

cyclohexylamine

SARA 313 Emission Reporting

The Following ingredients are listed morpholine

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 None Listed.

### California Air Toxics "Hot Spots" (A-Ii)

The Following ingredients are listed None Listed.

#### Massachusetts "Right To Know" List

The Following ingredients are listed 2-diethylaminoethanol N,N-diethylethanolamine

morpholine cyclohexylamine

### Rhode Island "Right To Know" List

The Following ingredients are listed cyclohexylamine

# Minnesota "Right To Know" List

The Following ingredients are listed 2-diethylaminoethanol N,N-diethylethanolamine

morpholine cyclohexylamine

### New Jersey "Right To Know" List

The Following ingredients are listed 2-diethylaminoethanol N,N-diethylethanolamine

morpholine cyclohexylamine

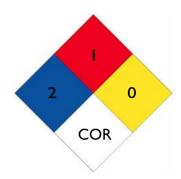
### Pennsylvania "Right To Know" List

The Following ingredients are listed 2-diethylaminoethanol N,N-diethylethanolamine

morpholine cyclohexylamine

### **SECTION 16: OTHER INFORMATION**

# NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



# HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

Health	2
Flammability	1
Physical Hazard	0
Personal Protection	Н

#### Disclaimer

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