Product BW851 Revision Date 6/08/2016

Revision 2



# Safety Data Sheet

# **SECTION I: IDENTIFICATION**

Product Name BW851

Identifier Uses Boiler Treatment.

**Supplier** Cannon Water Technology, Inc.

233 Technology Way, Suite 9 Rocklin, California 95765 Tel: 916-315-2691

Contact Person <u>csd@cannonwater.com</u>

Emergency Telephone 24-HOUR EMERGENCY TELEPHONE: CHEMTEL: 1-800-255-3924

CONTRACT # MIS0001465

352-323-3500

#### **SECTION 2: HAZARDS IDENTIFICATION**

Appearance Clear, amber 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

 $\textbf{Precaution ary Statements} \hspace{1.5cm} \textbf{P280 Wear protective gloves/ protective clothing/eye protection}.$ 

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. IA - H314, Acute Tox 5 - H303

**Environment** Not classified

OSHA RegulatoryStatus This product is Hazardous under the OSHA Hazard communication Standard.

Inhalation Harmful if inhaled.

IngestionHarmful if swallowed. May cause stomach pain or vomiting.Skin contactCorrosive! Can cause redness, pain, and severe skin burns.

**Eye contact** Causes severe eye burns.

Routes of Exposure Unknown

BW851 Page: I

#### **SECTION 3: COMOSITION / 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.

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.

Skincontact 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**

No Information available. Auto Ignition Temperature (°C) FlammabilityLimit-Lower (%) No Information available. FlammabilityLimit-Upper (%) No Information available. **Flashpoint** 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, nitrogenoxide.

**Unusual Fire & Explosion Hazards Special Fire Fighting Procedures** 

Protective equipment for fire-

fighters

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

Use water to cool containers exposed to a fire.

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 Spill Clean Up Methods** 

Keep out of drains, municipal sewers, open bodies of water and water course.

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.

BW851 Page: 2

#### **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

moke.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### Information on Basic Physical and Chemical Properties

Appearance Clear amber 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

Flashpoint No Information available.

**Evaporation rate** No Information available.

BW851 Page: 3

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** 9.70 @ 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 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 Skin Sensitization Reproductive Toxicity: Germ Cell Mutagenicity: Genotoxicity - In Vitro Genotoxicity - In Vivo No Information available. No Information available. No Information available.

Carcinogenicity:

Carcinogenicity No Information available

NTP - Carcinogenicity

OSHA - Carcinogenicity

IARC Carcinogenicity

The product and its components are not listed.

The product and its components are not listed.

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 - LC50 48 Hours >6750.00ppm Daphnia magna

**Aquatic Invertebrates** 

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

BW851 Page: 5

ICAO Class 8

**Transport Labels** 



DOT PackGroup

IMDG Pack Group ||

Air Pack Group ||

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

BW851 Page: 6

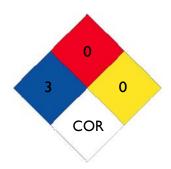
# Pennsylvania "Right To Know" List The Following ingredients are listed

 $potassium\, hydroxide$ phosphonic acid

 $\hbox{$2$-diethylaminoethanol} \quad N, N-\hbox{diethylethanolamine}$ 

# **SECTION 16: OTHER INFORMATION**

# NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)



# HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	С

**Revision Comments** 

Revision Date 6/08/2016 Revision 2

#### 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.