



## BWT-720

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** BWT-720  
**Common Name:** Potassium Hydroxide  
**SDS Number:** 0720  
**Revision Date:** 11/30/2016  
**Product Use:** Water Treatment Compound  
**Supplier Details:** Alliance Group, Inc. 800-648-7339  
N114 W18621 Clinton Drive  
Germantown, WI 53022  
  
**Contact:** CHEMTEL  
**Phone:** 1-800-255-3924

### 2 HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Serious Eye Damage/Eye Irritation, 1  
Health, Skin corrosion/irritation, 1 A  
Health, Skin sensitization, 1  
Health, Acute toxicity, 5 Inhalation  
Health, Acute toxicity, 5 Oral  
Environmental, Hazards to the aquatic environment - Chronic, 3

#### GHS Label Elements, Including Precautionary Statements

**GHS Signal Word:** **DANGER**

**GHS Hazard Pictograms:**



#### GHS Hazard Statements:

H318 - Causes serious eye damage  
H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction  
H333 - May be harmful if inhaled  
H303 - May be harmful if swallowed  
H412 - Harmful to aquatic life with long lasting effects

#### GHS Precautionary Statements:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338 - IF IN EYES: Rinse continuously 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.  
P363 - Wash contaminated clothing before reuse.  
P405 - Store in secure manner  
P501 - Dispose of contents/container to an approved waste disposal plant.

## Hazards not Otherwise Classified (HNOC) or not Covered by GHS

|                        |  |
|------------------------|--|
| <b>Route of Entry:</b> | Eyes; Inhalation; Ingestion; Skin.   |
| <b>Target Organs:</b>  | Respiratory system; Eyes; Skin.  |
| <b>Inhalation:</b>     | Can cause severe irritation and inflammation of the respiratory tract. Vapors or airborne mist may cause damage to upper respiratory tract, nasal discomfort and coughing. |
| <b>Skin Contact:</b>   | Corrosive: May cause irritation, swelling and redness. Note that irritation may follow an initial latency period which will vary depending on concentration exposure.      |
| <b>Eye Contact:</b>    | Corrosive: May cause irritation. May cause permanent eye damage. Effects may vary depending on length of exposure, concentration of the solution, and first aid measures.  |

### 3 COMPOSITION/INFORMATION OF INGREDIENTS

#### Ingredients:

\*Substance/Mixture: Mixture

| Cas#       | %    | Chemical Name                                     |
|------------|------|---|
| 71050-62-9 | <10% | 2-Propenoic acid, polymer with sodium phosphinate |
| 6381-77-7  | <10% | D-erythro-Hex-2-enonic acid, monosodium salt      |
| 26099-09-2 | <10% | 2-Butenedioic acid (2Z)-, homopolymer             |
| 100-37-8   | <15% | Diethylaminoethanol                               |
| 497-19-8   | <5%  | Carbonic acid disodium salt                       |
| 1310-58-3  | <10% | Potassium hydroxide                               |

### 4 FIRST AID MEASURES

|                      |  |
|----------------------|--|
| <b>Inhalation:</b>   | If symptoms develop, move victim to fresh air. Give oxygen or artificial respiration if needed. GET IMMEDIATE MEDICAL ATTENTION.   |
| <b>Skin Contact:</b> | Promptly flush skin with water for 15 minutes. Remove contaminated clothing immediately. Get immediate medical attention. Do not reuse clothing and shoes until cleaned. Discard leather articles such as shoes and belt. Do not apply oils and ointments unless ordered by a physician.       |
| <b>Eye Contact:</b>  | Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Get immediate medical attention.  |
| <b>Ingestion:</b>    | If swallowed: If fully conscious, drink a quart of water. Do NOT induce vomiting. Seek immediate medical attention. If unconscious, take to a hospital or physician. Never induce vomiting or give anything by mouth to an unconscious victim. For spontaneous vomiting, keep head below hips. |

### 5 FIRE FIGHTING MEASURES

|                            |                    |
|----------------------------|--------------------|
| <b>Flammability:</b>       | No data available  |
| <b>Flash Point:</b>        | No data available  |
| <b>Flash Point Method:</b> | No data available. |
| <b>Burning Rate:</b>       | No data available. |
| <b>Autoignition Temp:</b>  | No data available. |
| <b>LEL:</b>                | No data available. |
| <b>UEL:</b>                | No data available. |

#### Fire Fighting Methods

Evacuate area of unprotected personnel. Wear protective clothing including NIOSH Approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire exposed containers and disperse vapors.

#### Unusual Fire or Explosion Hazards:

This material in contact with water or acids may generate sufficient heat to ignite nearby combustible materials. Contact with aluminum, tin, or zinc will result in the generation of heat and release of hydrogen gas. Run-off from fire control may cause pollution. Keep fire-exposed containers cool with water spray to prevent rupture due to excessive heat. High pressure water hose may spread product and produce irritating fumes and toxic gases (including carbon monoxide, carbon dioxide, and sodium oxides). Products of combustion are irritating to the respiratory tract and may cause breathing difficulty. Symptoms may be delayed several hours or longer depending upon extent of exposure.

#### Extinguishing Media

**Suitable:** Water spray, alcohol- resistant foam, dry chemical, or carbon dioxide.

**Unsuitable fire extinguisher:** No data available.

## 6

### ACCIDENTAL RELEASE MEASURES

#### Personal Precautions

Evacuate area. Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

#### Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let products enter drains. Discharge into the environment must be avoided.

#### Spill

Soak up with inert absorbent material and dispose of as hazardous waste. Neutralize remaining traces of material with any dilute inorganic acid. The spill area should be flushed with water and followed by liberal covering of sodium bicarbonate.

Keep in suitable, closed containers for disposal.

## 7

### HANDLING AND STORAGE

#### Handling Precautions:

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors or mist. Wash thoroughly after handling. Do not puncture or drop containers.

Do not expose containers to open flame, excessive heat, or direct sunlight.

#### Storage Requirements:

Store in cool/dry area. Keep container tightly closed in a dry and well ventilated area. Do not freeze. Do not store in unlabeled or mislabeled containers.

## 8

### EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering Controls:

Provide local exhaust ventilation. Maintain adequate ventilation. Do not use in confined spaces.

#### Personal Protective

Hygiene Measures

#### Equipment:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Respiratory

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Eyes and Face

Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid or airborne material.

Skin

Prevent contact with this product. Wear gloves and protective clothing depending on conditions of use.

Protective gloves: gauntlet-type, neoprene, nitrile.

| <u>Component</u>    | <u>OSHA PEL</u>     | <u>ACGIH TWA/ TLV</u> |
|---------------------|---------------------|-----------------------|
| Sodium Hydroxide    | 2 mg/m <sup>3</sup> | 2 mg/m <sup>3</sup>   |
| Diethylaminoethanol | 10 ppm -skin        | 2 ppm - skin          |
| Sodium Carbonate    | 5 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup>  |

## 9

### PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance:

Clear, light amber / brown

#### Physical State:

Liquid

#### Odor Threshold:

No data available.

#### Particle Size:

No data available.

#### Spec Grav./Density:

1.115

#### Odor:

Mild amine odor

#### Molecular Formula:

No data available.

#### Solubility:

Complete

#### Softening Point:

No data available.

**Viscosity:** No data available.  
**Sat. Vap. Conc.:** No data available.  
**Boiling Point:** 293° F  
**Flammability:** No data available.  
**Partition Coefficient:** No data available.  
**Vapor Pressure:** No data available.  
**pH:** >11  
**Evap. Rate:** No data available  
**Molecular weight:** No data available.  
**Decomp Temp:** No data available.

**Percent Volatile:** No data available  
**Heat Value:** No data available.  
**Freezing/Melting Pt.:** 32°F  
**Flash Point:** No data available.  
**Octanol:** No data available.  
**Vapor Density:** No data available  
**VOC:** None  
**Bulk Density:** No data available.  
**Auto-Ignition Temp:** No data available.  
**UFL/LFL:** No data available.

Lower Explosion Limits: No data available.  
Upper Explosion Limits: No data available.

## 10

### STABILITY AND REACTIVITY

**Reactivity:** No data available.  
**Chemical Stability:** Product is stable under normal conditions.  
**Conditions to Avoid:** Product absorbs carbon dioxide from the air. Keep container closed when not in use.  
**Materials to Avoid:** Strong acids. Aluminum. Zinc. Strong oxidizers.  
**Hazardous Decomposition:** Thermal decomposition may release: carbon monoxide, carbon dioxide, and sodium compounds.  
**Hazardous Polymerization:** Will not occur under normal conditions.

## 11

### TOXICOLOGICAL INFORMATION

#### Toxicity Data:

**Eye Effects:** Corrosive- Causes severe eye irritation and burns. May cause: blurred vision, redness, pain, conjunctivitis, ulcerations, tissue destruction, permanent eye damage, blindness.

**Skin Effects:** Corrosive- Causes severe irritation and burns. Concentrated solutions may cause: severe burns, severe necrosis, permanent skin damage. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and drying and cracking of the skin.

**Inhalation Effects:** Corrosive- Cause severe irritation and burns. Vapors and mists may damage: mucous membranes, respiratory tract. Vapors or mists may cause: coughing, sore throat, shortness of breath, labored breathing, choking, bronchospasms, chemical pneumonitis, pulmonary edema, death. Effects may be delayed. Chronic exposure may cause: dental erosions, discoloration of teeth, bronchitis, and bronchial emphysema.

**Ingestion Effects:** Corrosive- Causes severe irritation and burns. May cause damage to the: mouth, throat, esophagus, stomach, gastrointestinal tract. May cause: pain, vomiting, diarrhea, bleeding, labored breathing, burns or perforation of the gastrointestinal tract leading to ulceration and secondary infection, and death. Effects may be delayed. Aspiration into the lungs may cause chemical pneumonia and lung damage.

**Chronic Effects:** No data available.

**Carcinogenicity:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP, or OSHA.

**Mutagenicity:** No data available.  
**Teratogenicity:** No data available.  
**Fertility Effects:** No data available.

| <b>Component</b>    | <b>Oral LD50</b>  | <b>Dermal LD50</b>  | <b>Inhalation LC50</b> |
|---------------------|-------------------|---------------------|------------------------|
| Potassium Hydroxide | Rat:284 mg/kg     | No data available.  | No data available.     |
| Diethylaminoethanol | Rat:1300 mg/kg    | Rabbit: 1113 mg/ kg | Mouse: 5000mg/m3-4h    |
| Sodium Carbonate    | Rat - 4,090 mg/kg | No data available.  | Rat: 5,750 mg/l - 2H   |

#### Acute Toxicity Estimate (ATE):

Inhalation Vapor: No data available.

Inhalation Dust/Mist: No data available.

## 12

### ECOLOGICAL INFORMATION

**Biodegradability** No data available.

**Ecotoxicity** Toxicity to fish:

- LC50- Freshwater fish - 80 mg/L- 96 H (Potassium Hydroxide)
- LC50- Leuciscus idus (Golen orfe) - 100-220mg/L- 96 hr (Diethylaminoethanol)
- LC50 - Lepomis macrochirus (Bluegill) - 300 mg/l - 96 h (Sodium Carbonate)

Toxicity to aquatic invertebrates:

- EC50- Daphnia magna (Water flea) - 83.6 mg/L- 48 hr (Diethylaminoethanol)
- EC50 - Daphnia magna (Water flea) - 265 mg/l - 48 h. (Sodium Carbonate)

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

**13 DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local, state, and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind, or expose empty containers to heat, flame, sparks or other sources of ignition.

**14 TRANSPORT INFORMATION**

UN3267, Corrosive liquid, basic, organic, n.o.s., 8, PGII, (Potassium Hydroxide, Diethylaminoethanol)

**15 REGULATORY INFORMATION**

**FEDERAL REGULATIONS**

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category:

- Immediate(Acute) Health Hazard: YES
- Delayed (Chronic) Health Hazard:NO
- Fire Hazard: NO
- Sudden Release of Pressure Hazard:NO
- Reactive Hazard: NO

SARA Section 302/304/313/HAP:

| Component           | CERCLA RQ (LBS)    | SARA RQ(LBS)       | SARA TPQ(LBS)      | SARA SEC 313 | US EPA HAP |
|---------------------|--------------------|--------------------|--------------------|--------------|------------|
| Potassium Hydroxide | 1000               | No data available. | No data available. | NO           | NO         |
| Diethylaminoeth     | No data available. | No data available. | No data available. | NO           | NO         |

**STATE REGULATIONS**

**California-** The following components are listed under Prop 65: May contain trace amounts of components listed under Proposition 65

**Wisconsin-** The following components are listed as a Wisconsin HAP: Potassium Hydroxide, Diethylaminoethanol

HMIS III: Health = 2(Chronic), Fire = 0, Physical Hazard = 0

| HMIS                |                                     |   |
|---------------------|-------------------------------------|---|
| HEALTH              | <input checked="" type="checkbox"/> | 2 |
| FLAMMABILITY        |                                     | 0 |
| PHYSICAL HAZARD     |                                     | 0 |
| PERSONAL PROTECTION | <input type="checkbox"/>            |   |

**Note:** This product is not to be used in systems where steam is used for humidification

**Publication Date:** 11/31/16

**Prepared By:** T Hartmann

**Reason for Revision:** Update to Section 9

This information is given in good faith and based on our current knowledge of the product.

**Disclaimer:**

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