



Corporate Headquarters  
 10 Glenshaw Street, Orangeburg, NY 10962  
 Tel: 845.365.8200 • Fax: 845.365.8201  
 Toll-Free: 888.DYNAREX

Reviewed on 9/16/15

## SAFETY DATA SHEET

### SECTION 1. Product and Company Identification

**PRODUCT NAME:** BZK Antiseptic Towelette  
**PRODUCT USE:** Antiseptic  
**Product Code:** 1303, 1331

**Manufacturer's Name:** Dynarex Corporation  
**Manufacturer's Address:** 10 Glenshaw Street  
 Orangeburg, NY 10962

**Emergency or Information Phone No.:** 888-DYNAREX or 845-365-8200  
 At other times, contact the local Poison Control Center

### SECTION 2. Hazards Identification

Physical hazards	Not classified
Health hazards	Not classified
• Environmental hazards	Not determined
OSHA defined hazards	Not classified
Label elements	
• Hazard symbol	None
• Signal word	Not available
• Hazard statement	Not available
• Precautionary statement	
○ Prevention	Not available
○ Response	Not available
○ Storage	Not available
○ Disposal	Not available
Hazard(s) not otherwise classified (HNOC)	None known
Supplemental information	None



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### SECTION 3. Composition/information on Ingredients

Ingredients	CAS Number	%
BZK	8001-54-5	0.13
Water	7732-18-5	99.87

### SECTION 4. First-aid measures

#### First aid procedures

#### Eye Contact

Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

#### Skin Contact

In case of skin irritation, discontinue use of product.

#### Inhalation

Not a normal route of exposure. If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

#### Ingestion

Not a normal route of exposure. Do not induce vomiting, Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

#### Notes to physician

Symptoms may be delayed.

#### General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep out of reach of children. Avoid contact with eyes.

Flammable Limits: N/A

Flash Point: N/A





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## SECTION 5. Fire-fighting measures

**Flash Point:** Not Available  
**Flammable Limits:** Not Available  
**Extinguishing Media:** Any  
**Special Fire Fighting Procedures:** None  
**Unusual Fire and Explosion Hazards:** None

## SECTION 6. Accidental release measures

**Personal precautions:** Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

**Methods for containment:** Prevent entry into waterways, sewers, basements or confined areas.

**Methods for cleaning up:** Pick up and discard towel.

## SECTION 7. Handling and storage

**Handling:** Use good industrial hygiene practices in handling this material.

**Storage:** Keep out of reach of children. Store in a closed container away from incompatible materials.

## SECTION 8. Exposure controls/personal protection

**Engineering controls:** General ventilation normally adequate.

**Personal protective equipment**



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<b>Eye/Face protection</b>	Follow standard industrial hygiene practices.
<b>Hand protection</b>	Not required.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use and approved NIOSH respirator.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

## SECTION 9. Physical and chemical properties

<b>Appearance/Odor:</b>	Liquid saturated on wipe
<b>Color:</b>	Clear liquid
<b>Form:</b>	Liquid saturated on wipe
<b>Odor:</b>	Characteristic
<b>Odor Threshold:</b>	Not available
<b>Physical State:</b>	Solid
<b>Boiling Point:</b>	<200°F
<b>Paper Components:</b>	100% Virgin Paper
<b>Specific Gravity:</b>	1

## SECTION 10. Stability and reactivity

**Chemical Stability:** Stable under recommended storage conditions.  
**Incompatibility:** Caustics. Acids. Oxidizers.  
**Hazardous Decomposition Products:** May include and are not limited to: oxides of carbon; hydrogen chloride.  
**Hazardous Polymerization:** Will not occur.  
**Conditions to avoid:** Do not mix with other chemicals.

## SECTION 11. Toxicological information

### Effects of acute exposure

Eye

May cause irritation





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<b>Skin</b>	In case of skin irritation, discontinue use of the product.
<b>Inhalation</b>	Not a normal route of exposure. May cause respiratory tract irritation.
<b>Ingestion</b>	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic Effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Carcinogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Reproductive Effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.

## SECTION 12. Ecological information

- Ecotoxicity Not available
- Environmental effects Not available
- Aquatic toxicity Not available
- Persistence / degradability Not available
- Bioaccumulation / accumulation Not available
- Partition coefficient Not available
- Mobility in environmental media Not available
- Chemical fate information Not available
- Other adverse effects Not available

## SECTION 13. Disposal considerations

Waste codes: Not available



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**Disposal instructions:** Discard after single use.

Review federal, state/provincial, and local government requirements prior to disposal.

Discard with solid waste. Dispose in accordance with all applicable regulations.

**Waste from residues / unused products:** Not available

**Contaminated packaging:** Not available

## SECTION 14. Transport information

**U.S. Department of Transportation (DOT)** Not regulated as dangerous goods.

**Transportation of Dangerous Goods (TDG - Canada)** Not regulated as dangerous goods.

## SECTION 15. Regulatory information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**US Federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

**Occupational Safety and Health Administration (OSHA)**  
29 CFR 1910.1200 hazardous No chemical

**CERCLA (Superfund) reportable quantity**

Benzene: 10.0000  
Benzene, methyl-: 1000.0000  
Benzene, (chloromethyl)-: 100.0000  
Propylene oxide: 100.0000

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
Immediate Hazard - No  
Delayed Hazard - No





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Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**Safe Drinking Water Act (SDWA)** Not available

**Drug Enforcement Agency (DEA)** Not available

**Food and Drug Administration (FDA)** Not available

**State regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

## SECTION 16. Other information

### Disclaimer:

This Safety Data Sheet, which takes into consideration the requirements of Directive 76/768/EC and subsequent amendments and Directive 1999/45/EC plus subsequent amendments, has been prepared in accordance with Directive (EC) 1907/2006. It is believed to be correct and corresponds to the latest scientific/technical knowledge but all data, instructions, recommendations and/or suggestions are made without guarantee. No warranty, expressed or implied, is made and Dynarex Corp. assumes no legal responsibility or liability resulting from its use.

**SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION 1**

**Product Name:** Aquamate Granular Chlorinator for Swimming Pools, Private Brand Cal Hypo Granular.  
**Product ID:** 4500  
**Synonyms:** Calcium Hypochlorite Granular  
**Chemical Family:** Hypochlorite  
**Revised Date:** 06-09-2015  
**Type of Product and Use:** Sanitizer and Oxidizer swimming pool water treatment chemical  
**Supplier:** Arch Chemicals, Inc  
1200 Bluegrass Parkway  
Alpharetta, GA 30004  
800-654-6911  
**Emergency Telephone:** CHEMTREC 800-424-9300  
**Packaged By:** Baleco Int'l Inc.  
PO Box 11331  
Cincinnati, OH 45211  
513-353-3000

**SECTION 2 HAZARDS IDENTIFICATION 2**

**GHS Classification**  
Oxidizing Solids: Category 2  
Acute Toxicity (Oral): Category 4  
Skin corrosion: Category 1B  
Serious eye damage: Category 1  
Specific target organ toxicity: Category 3  
Single exposure:

**GHS Label element**  
Hazard Pictograms



Signal Word: Danger

Hazard statements:  
H272 May intensify fire: oxidizer.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H331 Toxic if inhaled.  
H335 May cause respiratory irritation.

Precautionary Statements: **Prevention:**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other Ignition sources. No smoking.  
P220 Keep/Store away from clothing/ combustible materials.  
P221 Take any precaution to avoid mixing with combustibles.



P260 Do not breathe vapours.  
 P264 Wash hands thoroughly after handling.  
 P270 Do not eat, drink or smoke when handling this product.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if You feel unwell.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P 353 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.

P310 Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical Or carbon dioxide to extinguish.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container in accordance with local regulation.

Other hazards: None known.

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

CAS OR CHEMICAL NAME	CAS NO.	%RANGE
CALCIUM HYPOCHLORITE	7778-54-3	60 – 80
SODIUM CHLORIDE	7647-14-5	10 – 20
CALCIUM CHLORATE	10137-74-3	0 – 5
CALCIUM CHLORIDE	10043-52-4	0 - 5
CALCIUM HYDROXIDE	1305-62-0	0 – 4
CALCIUM CARBONATE	471-34-1	0 – 5
Water	7732-18-5	5.5 – 10

**SECTION 4 FIRST AID MEASURES 4**

General Advice: Call a poison control center or doctor for treatment advice. For 24-hour emergency Medical assistance, call Chemtrec at 1-800-424-9300. Have the product container or Label with you when calling a poison control center or doctor, or going for treatment.

Inhalation: IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an Ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Skin Contact: IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately With plenty of water for 15 – 20 minutes. Call a poison control center or doctor for Treatment advice.

Eye Contact: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call A poison control center or doctor for treatment advice.

Ingestion: IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice.



Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to Do so by a poison control center or doctor. Do not give anything by mouth to an Unconscious person.

Notes to Physician:

Probable mucosal damage may contraindicate the use of gastric lavage.

## SECTION 5

## FIRE-FIGHTING MEASURES

5

**Flammability Summary (OSHA):** This product is chemically reactive with many substances. Any contamination of the product with other substances by spill or otherwise may result in a chemical reaction and fire. This product is a strong oxidizer which is capable of intensifying a fire once started., Product is not known to be flammable, combustible or pyrophoric.

### Flammable Properties

Flash Point:

Not applicable

Auto ignition Temperature:

Not applicable

**Fire Fighting Instructions:**

Extinguishing Media: Water only. Do not use dry extinguishers containing ammonium compounds.

Use water to cool containers exposed to fire. See Section 6 for protective equipment for fire fighting.

Upper Flammable / Explosive Limit,  
% in air:

Not applicable

Lower Flammable / Explosive Limit,  
% in air:

Not applicable

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

6

**Personal Protection for  
Emergency Situations:**

Response to a large quantity spill (100 pounds or greater) or when dusting or decomposition gas exposure could occur requires the use of a positive pressure full face supplied air respirator or self contained breathing apparatus (SCBA), chemical resistant gloves, coveralls and boots. In case of fire, this personal protective equipment should be used in addition to normal fire fighter equipment.

### Spill Mitigation Procedures

**Air Release:**

Vapors may be suppressed by the use of water fog. All water utilized to assist in fume suppression, decontamination or fire suppression may be contaminated and must be contained before disposal and/or treatment.

**Water Release:**

This product is heavier than water. This material is soluble in water. Monitor all exit water for available chlorine and pH. Advise local authorities of any contaminated water release.

**Land Release:**

Contact 1-800-654-6911 immediately. DANGER: All spills of this product should be treated as contaminated. Contaminated product may initiate a chemical reaction that may spontaneously ignite any combustible material present, resulting in a fire of great intensity. In case of a spill, separate all spilled product from packaging, debris and other material. Using a clean broom or shovel, place all spilled product into plastic bags, and place those bags into a clean, dry disposal container, properly marked and labeled. Disposal containers made of plastic or metal are recommended. Do not seal disposal containers tightly. Immediately remove all product in disposal containers to an isolated area outdoors. Place all damaged packaging material in a disposal container of water to assure decontamination (i.e. removal of all product) before disposal. Place all undamaged packaging in a clean, dry container properly marked and labeled. Call for disposal procedures.

**Additional Spill Information:**

Hazardous concentrations in air may be found in local spill area and immediately downwind. Remove all sources of ignition. Stop source of spill as soon as possible and notify appropriate personnel. Dispose of spill residues



per guidelines under Section 13, Disposal Consideration. This material may be neutralized for disposal; you are requested to contact Arch Chemicals at 1-800-654-6911 before beginning any such procedure. FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC: 1-800-424-9300 REPORTABLE QUANTITY: 10 lbs. (as calcium hypochlorite) per 40 CFR 302.4.

## SECTION 7 HANDLING AND STORAGE 7

Handling:	Avoid inhalation of dust and fumes. Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Remove contaminated clothing and wash before reuse.
Storage:	Keep product tightly sealed in original containers. Store product in a cool, dry, well-ventilated area. Store away from combustible or flammable products. Keep product packaging clean and free of all contamination, including, e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc.
Shelf Life Limitations:	Do not store product where the average daily temperature exceeds 95° F. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products. Shelf life (that is, the period of time before the product goes below stated label strength) is determined by storage time and temperatures. Store in a cool, dry and well ventilated area. Prolonged storage at elevated temperatures will significantly shorten the shelf life. Storage in a climate controlled storage area or building is recommended in those areas where extremes of high temperature occur.
Incompatible Materials for Storage:	Do not allow product to come in contact with other materials, including e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc. A chemical reaction with such substances can cause a fire of great intensity.
Do Not Store At temperatures Above:	Average daily temperature of 35° C / 95° F. Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION 8

Ventilation:	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.
<u>Protective Equipment for Routine Use of Product</u>	
Respiratory Protection:	Wear a NIOSH approved respirator if levels above the exposure limits are possible.
Respirator Type:	A NIOSH approved full-face air purifying respirator equipped with combination chlorine/P100 cartridges. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.
Skin Protection:	Wear impervious gloves to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body. A safety shower should be provided in the immediate work area.

Eye Protection: Use chemical goggles. Emergency eyewash should be provided in the immediate work area.

Protective Clothing Type: Neoprene, Nitrile, Natural rubber (This includes: gloves, boots, apron, protective suit)

**Components with workplace control parameters**

Components (CAS-No.)	Value	Control parameters	Basis (Updated)
CALCIUM HYPOCHLORITE (7778-54-3)	TWA	1 mg/m3	ARCH OEL*
CALCIUM HYPOCHLORITE (7778-54-3)	Conc	37-48 mg/m3	NIOSH/GUIDE IDLH
CALCIUM HYPOCHLORITE (1305-62-0)	TWA	5 mg/m3	ACGIH (02 2014)

ARCH OEL: Arch Recommended Occupational Exposure Guideline.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES 9**

Physical State: solid  
 Form: Free flowing, granular  
 Color: white  
 Odor: Chlorine-like  
 Molecular Weight: (Active ingredient)143.00 g/mol  
 pH: 10.4 - 10.8 (1% solution in neutral, distilled water) (@ 25 Deg. C)  
 Boiling Point: Not applicable Melting point/freezing point Not applicable  
 Density: 0.8g/cc  
 Vapor Pressure: (@ 25 Deg. C) Not applicable  
 Vapor Density: Not applicable  
 Viscosity: Not applicable  
 Fat Solubility: No data  
 Solubility in Water: 18 % (@ 25 Deg. C) Product also contains calcium hydroxide and calcium carbonate which will leave a residue.

Partition coefficient n-octanol/water: No data  
 Evaporation Rate: Not applicable  
 Oxidizing: Oxidizer  
 Volatiles, % by vol.: Not applicable  
 VOC Content: This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.  
 HAP Content: Not applicable

**SECTION 10 STABILITY AND REACTIVITY 10**

Stability and Reactivity Summary: Product is not sensitive to mechanical shock or impact. Product is not sensitive to electrical static discharge. Product will not undergo hazardous polymerization. Product is an NFPA Class 3 oxidizer which can cause a severe increase in fire intensity. Not pyrophoric. Not an organic peroxide. If subjected to excessive temperatures, the product may undergo rapid decomposition, evolution of chlorine gas, and heat sufficient to ignite combustible substances. If product is exposed to small amounts of water, it



Conditions to Avoid: can react violently to produce heat and toxic gases and spatter. Use copious amounts of water for fires involving this product. Do not store next to heat source, in direct sunlight, or elevated storage temperature. Do not store where the daily average temperature exceeds 95 °F. Prevent ingress of humidity and moisture into container or package. Always close the lid.

Chemical Incompatibility: This product is chemically reactive with many substances, including, e.g., other pool treatment products, acids, organics, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, corrosive, flammable or combustible materials. Do not allow product to contact any foreign matter, including other water treatment products. Contamination or improper use may cause a fire of great intensity, explosion or the release of toxic gases. If product is exposed to small amounts of water, it can react violently to produce heat and toxic gases and spatter.

Hazardous Decomposition Products: Chlorine  
 Decomposition Temperature: 170 - 180 °C - , 338 - 356 °F-

**SECTION 11** **TOXICOLOGICAL INFORMATION** **11**

Component Animal Toxicology

Oral LD50 value:  
 CALCIUM LD50 (65% calcium hypochlorite) 850 mg/kg RAT  
 HYPOCHLORITE  
 SODIUM CHLORIDE LD50 = 3,000 mg/kg Rat  
 CALCIUM CHLORIDE LD50 = 1,000 mg/kg Rat  
 CALCIUM HYDROXIDE LD50 = 7,340 mg/kg Rat

Component Animal Toxicology

Dermal LD50 value:  
 CALCIUM LD50 (65% calcium hypochlorite) > 2,000 mg/kg Rabbit  
 HYPOCHLORITE  
 SODIUM CHLORIDE LD50 > 10,000 mg/kg Rabbit  
 CALCIUM CHLORIDE LD50 = 2,630 mg/kg Rat  
 CALCIUM HYDROXIDE No data

Component Animal Toxicology

Inhalation LD50 value:  
 CALCIUM  
 HYPOCHLORITE Inhalation LC50 1 h (65% calcium hypochlorite), (Nose Only) = 2.04 mg/l Rat  
 Inhalation LC50 4 h (65% calcium hypochlorite), (Nose Only) = 0.51 mg/l Rat  
 SODIUM CHLORIDE Inhalation LC50 1 h > 42 mg/l Rat  
 CALCIUM CHLORIDE No data  
 CALCIUM HYDROXIDE No data

Product Animal Toxicology

Oral LD50 value: LD50 Approximately 800 mg/kg Rat  
Dermal LD50 value: LD50 >2,000 mb/kg Rabbit  
Inhalation LC50 value: Inhalation LC50 1.00 h (Nose Only) > 2.04 mg/l Rat  
 Inhalation LC50 4 h (Nose Only) > 0.51 mg/l Rat

Inhalation LC50 1 h (Nose Only) > 2.04 mg/l Rat  
Inhalation LC50 4 h (Nose Only) > 0.51 mg/l Rat

Skin Irritation: DRY MATERIAL CAUSES MODERATE SKIN IRRITATION. WET MATERIAL CAUSES SKIN BURNS.

Eye Irritation: Corrosive to eyes.

Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer.

Acute Toxicity: This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract. The dry material is irritating to the skin. However when wet, it will produce burns to the skin.

Subchronic / Chronic Toxicity: There are no known or reported effects from repeated exposure except those secondary to burns.

Reproductive and Developmental Toxicity: Calcium hypochlorite has been tested for teratogenicity in laboratory animals. Results of this study have shown that calcium hypochlorite is not a teratogen.

CALCIUM CHLORIDE Not known or reported to cause reproductive or developmental toxicity.

Mutagenicity: Calcium hypochlorite has been tested in the Dominant lethal assay in male mice, and it did not induce a dominant lethal response. Calcium hypochlorite has been reported to produce mutagenic activity in two in vitro assays. It has, however, been shown to lack the capability to produce mutations in animals based on results from the micronucleus assay. In vitro assays frequently are inappropriate to judge the mutagenic potential of bactericidal chemicals due to a high degree of cellular toxicity. The concentration which produces mutations in these in vitro assays is significantly greater than the concentrations used for disinfection. Based on high cellular toxicity in in vitro assays and the lack of mutagenicity in animals, the risk of genetic damage to humans is judged not significant.

CALCIUM CHLORIDE This product was determined to be non-mutagenic in the Ames assay. It was also shown to be non-clastogenic in the chromosomal aberration test.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. One hundred mice were exposed dermally 3 times a week for 18 months to a solution of calcium hypochlorite. Histopathological examination failed to show an increased incidence of tumors. IARC (International Agency for Research on Cancer) reviewed studies conducted with several hypochlorite salts. IARC has classified hypochlorite salts as having inadequate evidence for carcinogenicity to humans and animals. IARC therefore considers hypochlorite salts to be not classifiable as to their carcinogenicity to humans (Group 3 Substance).

CALCIUM CHLORIDE This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA.

## SECTION 12 ECOLOGICAL INFORMATION 12

Overview: Highly toxic to fish and other aquatic organisms.

### Ecological Toxicity Values for:

#### CALCIUM HYPOCHLORITE

Bluegill	-	(nominal, static). 96 h LC50 0.088 mg/l
Rainbow trout ( <i>Salmo gairdneri</i> ),	-	(nominal, static). 96 h LC50 0.16 mg/l
Daphnia magna,	-	(nominal, static). 48 h LC50 0.11 mg/l



Bobwhite quail	-	Dietary LC50 > 5,000 ppm
Mallard ducklings	-	Dietary LC50 > 5,000 ppm
Bobwhite quail	-	Oral LD50 3,474 mg/kg

Ecological Toxicity Values for:

<b>CALCIUM CHLORIDE</b>		
Bluegill	-	(nominal, static). 96 h LC50 = 10,650 mg/l
Mosquito fish	-	(nominal, static). 96 h LC50 = 13,400 mg/l
Pimephales promelas (fathead minnow)	-	(nominal, static). 96 h LC50 = 4,630 mg/l
Daphnia magna,	-	(nominal, static). 48 h LC50= 2,770 mg/l
Ceriodaphnia dubia	-	(nominal, static). 48 h LC50= 1,830 mg/l
Nitzschia linearis (diatom)	-	(nominal, static). 5 day LC50 = 3,130 mg/l

**SECTION 13 DISPOSAL CONSIDERATIONS 13**

**CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES**

**Waste Disposal Summary:** If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D001. If this product becomes a waste, it will be a hazardous waste which is subject to the Land Disposal restrictions under 40 CFR 268 and must be managed accordingly.

**Disposal Methods:** As a hazardous solid waste it should be disposed of in accordance with local, state and federal regulations.

**Potential US EPA Waste Codes:** D001

**SECTION 14 TRANSPORT INFORMATION 14**

**DOT**

UN number	:	2880
Description of the goods	:	Calcium hypochlorite, hydrated mixtures
Class	:	5.1
Packing group	:	II
Labels	:	5.1
Emergency Response Guidebook Number	:	140

**TDG**

UN number	:	2880
Description of the goods	:	Calcium hypochlorite, hydrated mixtures
Class	:	5.1
Packing group	:	II
Labels	:	5.1

**IATA**

UN number : 2880  
 Description of the goods : Calcium hypochlorite, hydrated mixtures  
 Class : 5.1  
 Packing group : II  
 Labels : 5.1  
 Packing instruction : 558  
 (passenger aircraft)  
 Packing instruction : Y544  
 (passenger aircraft)

**IMDG-CODE**

**IATA**

UN number : 2880  
 Description of the goods : Calcium hypochlorite, hydrated mixtures  
 Class : 5.1  
 Packing group : II  
 Labels : 5.1  
 EmS Number 1 : F-H  
 EmS Number 2 : S-Q  
  
 Marine pollutant : yes

**SECTION 15**

**REGULATORY INFORMATION**

**15**

**This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.**

Signal word : DANGER!  
 Hazard statements : Causes substantial but temporary eye injury. Corrosive. Causes skin burns.  
 Corrosive. Causes irreversible eye damage. This pesticide is toxic to fish.

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Calcium hypochlorite	7778-54-3	10	

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**CLEAN AIR ACT**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F)



This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489)

#### Clean Water Act

The following Hazardous Substances are listed under the U.S. Clean Water Act, Section 311, Table 116.4a:  
Calcium hypochlorite 7778-54-3

The following Hazardous Substances are listed under the U.S. Clean Water Act, Section 311, Table 117.3:  
Calcium hypochlorite 7778-54-3

This product does not contain any toxic pollutants listed under the U.S. Clean Air Act Section 307

#### US State Regulations

##### Massachusetts Right To Know

Calcium hypochlorite 7778-54-3  
Calcium carbonate 471-34-1  
Calcium chlorate 10137-74-3  
Calcium dihydroxide 1305-62-0

##### Pennsylvania Right To Know

Calcium hypochlorite 7778-54-3  
Calcium chloride 7647-14-5  
Calcium carbonate 471-34-1  
Calcium chlorate 10137-74-3  
Calcium chloride 10043-52-4  
Calcium dihydroxide 1305-62-0

##### Ney Jersey Right To Know

Calcium hypochlorite 7778-54-3  
Calcium chloride 7647-14-5  
Calcium carbonate 471-34-1  
Calcium chlorate 10137-74-3  
Calcium chloride 10043-52-4  
Calcium dihydroxide 1305-62-0

**California Prop 65** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### The components of this product are reported in the following inventories:

TSCA : This is an EPA registered pesticide.

#### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

## SECTION 16

## OTHER INFORMATION

16

**Disclaimer:** We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use in Section 1 of this SDS, please contact your sales or technical service representative.

Reason for Revision: Conversion to SDS format. Changes in all sections.

All Sections reformatted in accordance with OSHA Hazard Communication Standard 29 CFR 1910-1200(GHS). The information in this safety data sheet should be provided to all who will use, handles, store, transport, or otherwise be exposed to this product. This Information has been prepared for the guidance of plant engineering, operations and management and for persons working with or handling this product. Baleco believes this information to be reliable and up to date as of the date of publication, but makes no warranty that it is. Additionally, if this material safety data sheet is more than three years old, you should contact Baleco at The phone number listed in section 1 to make certain that this sheet is current.

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Baleco Int'l Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will Baleco Int'l Inc. be responsible for damages of any nature whatsoever resulting from the use or reliance upon information.

No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose or of any other nature, are made hereunder with respect to information or the product to which the information refers.

Prepared By: MSDS/SDS Department with information from the Supplier and Clearon Corp SDS for cyanuric acid.  
Baleco Int'l Inc.  
PO Box 11331  
Cincinnati, OH 45211  
(513)353-3000

End of Safety Data Sheet



# SAFETY DATA SHEET

## **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME: Springtime Clean-Up Absorbent

RECOMMENDED USE: Powder Absorbent to Clean-Up and Deodorize Body Fluid Spills

RESTRICTIONS ON USE: None Known

MANUFACTURER:

H&S Manufacturing Company

727 East Broadway

Williston, ND 58801

TELEPHONE: (701) 572-5400 (Monday-Thursday 8:00 a.m. CST - 5:00 p.m. CST)

(Friday 8:00 a.m. CST - 12:00 p.m. CST)

EMERGENCY TELEPHONE NUMBER: (701) 572-5400 (Monday-Thursday 8:00 a.m. CST - 5:00 p.m. CST)

(Friday 8:00 a.m. CST - 12:00 p.m. CST)

ITEM NUMBER: AB-722; AB-606; AB-125

SDS DATE OF PREPARATION: January 15, 2016

## **SECTION 2: HAZARDS IDENTIFICATION**

GENERAL: Contains small amounts of chemicals that are hazardous to health and the environment, but in quantities too small to constitute any practical risks to health or the environment.

CLASSIFICATION:

Acute Toxicity Oral 4

Skin Sensitization 1

Carcinogen Category 1A

Specific Target Organ Toxicity, Repeated Exposure Category 1



HAZARD PHRASES:

Harmful if swallowed

May cause an allergic skin reaction

May cause eye, skin and respiratory tract irritation

May cause cancer by inhalation

Causes damage to lungs through prolonged or repeated exposure

PRECAUTIONARY PHRASES:

Keep out of reach of children

Wear suitable gloves

Wash hands thoroughly after handling

If swallowed, call a physician

If on skin wash with plenty of water

If rash occurs, get medical attention

Dispose of contents to an approved waste disposal plant

## **SECTION 3: INGREDIENT INFORMATION**

<u>Ingredient Identification</u>	<u>Approximate Concentration</u>	<u>C.A.S. Numbers</u>
Diatomaceous Earth, Flux-Calcined (kieselguhr) (contains 35-50% Crystalline Silica - Cristobalite)	82%	68855-54-9 14464-46-1
2-Propenoic acid, homopolymer, potassium salt	17.25%	25608-12-2
Alcohols, c10-14, ethoxylated	0.50%	66455-15-0
Alcohols, c10-16, ethoxylated	0.25%	68002-97-1

## **SECTION 4: FIRST AID MEASURES**

General: Remove contaminated clothing

Inhalation: Keep patient calm, remove to fresh air, blow nose to evacuate dust, seek medical attention.

Assist in breathing if necessary.

Ingestion: Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.

Skin: Wash thoroughly with soap and water. If irritation develops, seek medical attention.

Eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical attention.

Physician: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

#### **SECTION 5: FIRE FIGHTING MEASURES**

Extinguishing Media: Water spray, dry powder, foam  
Unsuitable Extinguishing Media: Carbon dioxide, water jet  
Additional Information: Avoid whirling up the material/product because of the danger of dust explosion.  
Protective Fire-Fighting Equip.: Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal Precautions: Breathing protection required, protect eyes with goggles  
Environmental Precautions: Do not discharge into drains/surface waters/groundwater  
Clean-up: Spills should be contained and placed in suitable containers for disposal  
Further Information: Forms slippery surfaces with water. High risk of slipping due to leakage/spillage of product.

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

Precautions For Safe Handling: Minimize dust generation. Avoid contact with eyes. Do not breathe dust. This product is capable of dust explosion. Avoid all sources of ignition: heat, sparks, open flame.  
Conditions For Safe Storage: Store in a dry place to maintain packaging integrity and product quality. Do not store near hydrofluoric acid or concentrated caustic solutions.

#### **SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION**

Respiratory Protection: Breathing protection if dusts are formed  
Hand Protection: Chemical resistant protective gloves  
Eye Protection: Tightly fitting safety goggles  
General Safety & Hygiene: Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Wash soiled clothing immediately.

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

Appearance: White powder  
Odor: Fresh Scent  
Odor Threshold: Not determined  
Color: White  
pH Value: 10% Suspension (10)  
Melting Point: Estimated 60° C  
Boiling Point: Not Applicable  
Flash Point: Not Applicable  
Evaporation Rate: Not Applicable  
Flammability: Not determined/applicable  
UEL: Not determined  
LEL: Not determined  
Vapor Pressure: Not determined/applicable  
Vapor Density: Not determined/applicable  
Relative Density: 2.3  
Solubility in Water: Insoluble, only capable of swelling  
Partition Coefficient: Not determined/applicable  
Autoignition Temp: Not Applicable  
Decomposition Temp: >1300° C  
Physical State: Solid  
Viscosity: Not Applicable



## **SECTION 10: STABILITY AND REACTIVITY**

Reactivity:	Material is not reactive
Conditions to Avoid:	Avoid extreme heat and naked flames
Materials to Avoid:	Hydrofluoric acid and concentrated caustic solutions, atmospheric moisture, strong oxidizing agents
Stability:	Material is stable
Hazardous Reactions:	Material is not reactive under normal conditions of handling
Decomposition Products:	None if stored and handled as prescribed. Otherwise; hydrocarbons, carbon monoxide, carbon dioxide

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### Potential Health Effects

#### Likely Routes of Exposure

See below

Eye	May cause irritation (tear formation and redness) if dust gets in eyes
Skin	Not absorbed by the skin, but may cause dryness if prolonged exposure
Ingestion	Ingestion of small quantities is not considered harmful, but may cause irritation of the mouth, throat and stomach
Inhalation	Acute inhalation can cause dryness of the nasal passage and lung congestion, coughing and general throat irritation. Acute inhalation of high concentrations of respirable crystalline silica may cause acute silicosis.
Chronic Effects	This product contains crystalline silica. Respirable crystalline silica may cause lung cancer and lung disease (silicosis) if inhaled for prolonged periods. Symptoms of silicosis include wheezing, cough and shortness of breath.
Carcinogenicity	Flux-calcined diatomaceous earth (Kieselguhr) is composed of amorphous and crystalline silica. Respirable crystalline silica (cristobalite) is classified by IARC and NTP as a known human carcinogen. Crystalline silica is only known to cause cancer when inhaled in a respirable form. It is not known to cause cancer by any other route of exposure.
NTP/IARC	Respirable crystalline silica (cristobalite) is classified as a known human carcinogen.
Numerical Measures of Toxicity	No data available
Corrosiveness, Sensitization	Not applicable
Reproductive Toxicity	Not available
Teratogenicity, Mutagenicity	Not available

## **SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity:	This product can be toxic to fish and aquatic invertebrates
Persistence and Degradability:	Non-biodegradable, inert
Bioaccumulative Potential:	Little potential for bioaccumulation
Mobility in Soil:	No mobility
Other Adverse Effects:	Do not release untreated into natural waters. The ecotoxic effect of the product has not been tested.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with Local Authority requirements.

## **SECTION 14: TRANSPORT INFORMATION**

Basic Shipping Information:	DOT shipping classification 55 (no restrictions).
Additional Information:	No special requirements or placarding necessary.

## **SECTION 15: REGULATORY INFORMATION**

U.S. Federal: TSCA	Diatomaceous Earth and Cristobalite appear on the EPA TSCA inventory list.
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CERCLA

Diatomaceous Earth is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR 302.

SARA TITLE III

Not Listed

California Proposition 65:

This product contains crystalline silica, a chemical known to the State of California to cause cancer.

INTERNATIONAL:

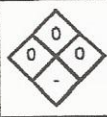
WHMIS Classification

Class D-2-A

WHMIS Ingredient Disclosure List:

Silica, crystalline, cristobalite

**SECTION 16: OTHER INFORMATION**

NFPA		4-Extreme 3-High 2-Moderate 1-Slight 0-Insignificant	HMIS	* Health
				0 Flammability
				0 Reactivity
				E Protective Equipment



## 1. Identification

<b>Product identifier</b>	<b>QT-TB</b>
<b>Other means of identification</b>	
<b>SDS number</b>	538N-57A
<b>Product code</b>	HIL01011
<b>Product registration number</b>	1839-83-1658
<b>Recommended use</b>	Disinfectant/Cleaner
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Manufacturer</b>	
<b>Company name</b>	HILLYARD INDUSTRIES
<b>Address</b>	302 North Fourth St. St. Joseph, MO 64501
<b>Contact person</b>	Regulatory Affairs
<b>Telephone number</b>	(816) 233-1321 (Ext. 8285)
<b>Fax</b>	(816) 383-8485
<b>E-mail</b>	regulatoryaffairs@hillyard.com
<b>Emergency telephone #</b>	(800) 424-9300 (Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2B
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		
<b>Hazard symbol</b>	None.	
<b>Signal word</b>	Warning	
<b>Hazard statement</b>	Combustible liquid. Causes eye irritation.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.	
<b>Response</b>	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.	
<b>Storage</b>	Store in a well-ventilated place. Keep cool.	
<b>Disposal</b>	Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.	
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.	
<b>Supplemental information</b>	None.	

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-(2-butoxyethoxy)ethanol		112-34-5	5 - < 10
Tetrasodium ethylenediamine tetraacetate		64-02-8	1 - < 3
Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride		85409-23-0	< 0.2
Alkyl dimethyl benzyl ammonium chloride (C12-18)		68391-01-5	< 0.2
Other components below reportable levels			90 - 100

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Combustible liquid.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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**Methods and materials for containment and cleaning up**

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

**Environmental precautions**

**7. Handling and storage**

**Precautions for safe handling**

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL. PESTICIDE STORAGE - Store in a dry place no lower in temperature than 50°F or higher than 120°F.

Keep away from heat, sparks and open flame. Store away from incompatible materials (see Section 10 of the SDS).

Do not contaminate water, food or feed by storage or disposal. Pesticide Storage: Open dumping is prohibited. Store in original container in areas inaccessible to children.

**8. Exposure controls/personal protection**

**Occupational exposure limits**

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
2-(2-butoxyethoxy)ethanol (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Use safety eyewear with splash guards or side shields, chemical goggles, or face shields.

**Skin protection**

**Hand protection**

Wear protective gloves.

**Other**

None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing.

**Respiratory protection**

Not normally required with adequate ventilation. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

**Appearance**

Clear, colorless liquid

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Colorless

**Odor**

Lemon odor

**Odor threshold**

Not available

<b>pH</b>	12 - 13 Concentrate
<b>Melting point/freezing point</b>	Not applicable / Not available
<b>Initial boiling point and boiling range</b>	210 °F (98.89 °C)
<b>Flash point</b>	> 180.0 °F (> 82.2 °C) Tag Closed Cup
<b>Evaporation rate</b>	< 1 (ethyl ether = 1)
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	17.36 mm Hg
<b>Vapor density</b>	1.03 Air = 1
<b>Relative density</b>	1.02 at 77°F
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	100 % Complete
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available
<b>Viscosity</b>	Not available
<b>Other information</b>	
<b>Density</b>	8.49 lb/gal
<b>Percent volatile</b>	96.5 - 97.5 %
<b>VOC (Weight %)</b>	8.01 %

## 10. Stability and reactivity

<b>Reactivity</b>	Reacts violently with strong acids. This product may react with oxidizing agents.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Contact with incompatible materials.
<b>Incompatible materials</b>	Acids. Oxidizing agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Causes eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

### Information on toxicological effects

**Acute toxicity** Toxicity data is not available for this mixture. Data below are estimates based on summation methods.

Product	Species	Test Results
QT-TB		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	33750 mg/kg estimated



Product	Species	Test Results
<i>Inhalation</i>		
LC50	Mouse	5882.353 mg/l, 2 Hours estimated 5871.021 mg/l, 4 Hours estimated
	Rat	12058.8232 mg/l, 0.5 Hours estimated 7058.8237 mg/l, 4 Hours estimated
<i>Oral</i>		
LD50	Guinea pig	24837.5996 mg/kg estimated
	Mouse	27265.4043 mg/kg estimated
	Rabbit	27500 mg/kg estimated
	Rat	48439.9336 mg/kg estimated
Components	Species	Test Results

2-(2-butoxyethoxy)ethanol (CAS 112-34-5)

**Acute**

*Dermal*

LD50 Rabbit 2700 mg/kg

*Oral*

LD50 Guinea pig 2000 mg/kg  
 Mouse 2400 mg/kg  
 Rabbit 2200 mg/kg  
 Rat 4500 mg/kg

Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)

**Acute**

*Oral*

LD50 Rat > 2000 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Prolonged inhalation may be harmful.

**Chronic effects** Prolonged inhalation may be harmful.

**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.

Product	Species		Test Results
QT-TB			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	27111.5469 mg/l, 48 hours estimated
Fish	LC50	Fish	14750.9004 mg/l, 96 hours estimated
<b>Components</b>	<b>Species</b>		<b>Test Results</b>

2-(2-butoxyethoxy)ethanol (CAS 112-34-5)

**Aquatic**

Fish LC50 Bluegill (*Lepomis macrochirus*) 1300 mg/l, 96 hours

Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)

**Aquatic**

Fish LC50 Bluegill (*Lepomis macrochirus*) 472 - 500 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

2-(2-butoxyethoxy)ethanol 0.56

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions** PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** PESTICIDE DISPOSAL – Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Contaminated packaging** CONTAINER DISPOSAL – Nonrefillable container. Do not reuse or refill container. Clean container promptly after emptying. Triple rinse as follows: Fill container ¼ full with water. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Repeat this procedure two more times. Offer for recycling or reconditioning, if available. If not available, puncture and dispose in a sanitary landfill. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**  
Not regulated as dangerous goods.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List or Exempt.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.



**SARA 304 Emergency release notification**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No**SARA 313 (TRI reporting)**  
Not regulated.**Other federal regulations****Safe Drinking Water Act (SDWA)** Not regulated.**FIFRA Information** FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 1839-83-1658, and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide products. The hazard information required on the pesticide label is reproduced here.

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS  
 CAUTION

KEEP OUT OF REACH OF CHILDREN. Causes moderate eye irritation. Avoid contact with eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

FIRST AID: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.  
 NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 04-04-2015  
**Version #** 01  
**HMIS® ratings** Health: 1  
Flammability: 2  
Physical hazard: 0

**Disclaimer** No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.