

## MATERIAL SAFETY DATA SHEET (MSDS)

#182 (1)

MANUFACTURER/DISTRIBUTOR NAME: H & S MANUFACTURING, INC.  
 ADDRESS: 727 EAST BROADWAY  
 WILLISTON, ND 58801  
 EMERGENCY TELEPHONE NUMBER: CONTACT YOUR LOCAL POISON INFORMATION CENTER  
 PHONE (24 hr) TECHNICAL (800) 827-3091  
 EFFECTIVE DATE: 5/1/96

PRODUCT NAME: SPRINGTIME™ CLEAN-UP ABSORBENT POWDER

	<u>INGREDIENTS</u>	<u>HMSI</u> : Health 0/0 Fire 0/0
DIATOMACEOUS EARTH		
CAS REG. NO.: NOT EST.	PERCENTAGE: 15-35%	Reactivity 0/0 Special 0/0
TLV: 10mg/M3		

PHYSICAL DATA

BOILING POINT: N/A      SPECIFIC GRAVITY: N/A      VAPOR PRESSURE: N/A  
 PERCENT VOLATILE BY VOLUME: 0      VAPOR DENSITY: N/A  
 EVAPORATION RATE: N/A  
 SOLUBILITY IN WATER: NEGLIGIBLE  
 APPEARANCE AND ODOR: GRANULAR WHITE SOLID WITH FRAGRANT ODOR

FIRE AND EXPLOSIVE DATA

FLASH POINT: NONE      FLAMMABLE LIMITS: N/A  
 LEL: N/A      UEL: N/A  
 EXTINGUISHING MEDIA: WATER, CO<sub>2</sub>, FOAM, DRY CHEMICAL  
 SPECIAL FIRE FIGHTING PROCEDURES: AVOID STRONG OXIDIZING AGENTS  
 UNUSUAL FIRE AND EXPLOSION HAZARDS: PRODUCT BECOMES SLIPPERY WHEN WET DUE TO GEL FORMATION

REACTIVE HAZARDS

PRODUCT STABLE: YES  
 CONDITIONS TO AVOID: KEEP AWAY FROM HEAT AND OPEN FLAMES  
 INCOMPATIBILITY: HYDROFLUORIC ACID, STRONG OXIDIZING AGENTS  
 HAZARDOUS DECOMPOSITION PRODUCTS: NONE  
 HAZARDOUS POLYMERIZATION: WILL NOT OCCUR  
 CONDITIONS TO AVOID: HIGH DUST CONCENTRATIONS

HEALTH HAZARDS

EFFECTS OF OVEREXPOSURE: MAY CAUSE TEMPORARY IRRITATION OR INFLAMMATION OF THE EYE, NOSE AND BRONCHI.

FIRST AID PROCEDURE

INHALATION: REMOVE PERSON TO FRESH AIR.  
 SKIN OR EYE CONTACT: FLUSH WITH RUNNING WATER FOR SEVERAL MINUTES.  
 INGESTION: DRINK LARGE QUANTITY OF WATER. DO NOT INDUCE VOMITING. SEE A PHYSICIAN.

HANDLING PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: VACUUM DRY SPILL. IF SPILL BECAME WET AND GELLED, SHOVEL UP OR HOSE IT DOWN WITH COPIOUS AMOUNTS OF WATER. SURFACE UPON WHICH MATERIAL HAS BEEN APPLIED WILL BECOME SLIPPERY WHEN WET.  
 WASTE DISPOSAL METHOD: COMPLY WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO MAJOR PRECAUTIONS.  
 RCPA: NON-HAZARDOUS  
 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN COOL, DRY PLACE TO PROTECT PRODUCT FROM MOISTURE. KEEP OUT OF REACH OF CHILDREN. OPERATORS APPLYING LARGE AMOUNTS OF PRODUCT SHOULD WEAR APPROVED DUST RESPIRATORS AND GOGGLES.

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): FOR USE WITH LARGE AMOUNTS OF MATERIAL. WEAR NIOSH APPROVED RESPIRATOR AS REQUIRED.  
 VENTILATION: MECHANICAL EXHAUST IS ADEQUATE. PROTECTIVE GLOVES: NOT REQUIRED.  
 EYE PROTECTION: WHEN APPLYING LARGE AMOUNTS OF MATERIAL, USE APPROVED GLOVES.  
 OTHER PROTECTIVE EQUIPMENT: NOT REQUIRED.

**PRODUCT INFORMATION****CHEMICAL NAME:** Calcium hypochlorite.**SYNONYMS:**

Calcium oxychloride, bleaching powder, chlorinated lime, granulated chlorinem, and Chloryte 65%.

**CHEMICAL FAMILY:** Salt of hypochlorous acid.**MOLECULAR FORMULA:** Ca(OCl)<sub>2</sub>**SHIPPING NAME:** Calcium hypochlorite.**PIN - (UN/NA):** UN1748 Cl5.1(9.2) P.G.II**WHMIS:** Exempt (P.C.P. regulated).**PRODUCT USE:**

Disinfection in swimming pools and drinking water supplies; treatment of industrial cooling water; slime control; odour control; sewage and waste water treatment.

**MANUFACTURER:** Saskatoon Chemicals Ltd.

Box 1586

Saskatoon, SK S7K 3R3

**EMERGENCY TELEPHONE NUMBER:** (306) 931-7767**SUPPLIER:** PrairieChem Inc.

231 Robin Crescent

Saskatoon, SK S7L 6M8

**EMERGENCY TELEPHONE NUMBER:** (306) 664-2522**HAZARDOUS INGREDIENTS**

INGREDIENTS:	WEIGHT %	C.A.S. REGISTRY NUMBER:
Calcium hypochlorite	65	7778-54-3
Calcium hydroxide	4	1305-62-0
Inerts	35	

**PHYSICAL DATA****PHYSICAL STATE:** Solid**ODOUR AND APPEARANCE:**

White, granular solid, with a strong chlorine odour.

**ODOUR THRESHOLD:** Not available.**VAPOUR PRESSURE:** Not applicable. **VAPOUR DENSITY:** Not applicable.**EVAPORATION RATE:** Not applicable. **pH:** 11.5 (5% solution)**BOILING POINT:** Not applicable. **SPECIFIC GRAVITY:** 2.00-2.20 @ 20 °C.**MELTING POINT:** Decomposes at temperatures above 100°C.**SOLUBILITY IN WATER:** 21% @ 20 °C. **MOLECULAR WEIGHT:** 142.98**% VOLATILE BY VOLUME:** Not available.**COEFFICIENT OF WATER/OIL DISTRIBUTION:** Not applicable.**FIRE AND EXPLOSION DATA****CONDITIONS OF FLAMMABILITY:** Not available.**MEANS OF EXTINGUISHING:**

Drench with water, and cool surrounding products and area with water. Water in contact with hot Hypochlorites can release hydrochloric acid or chlorine gas. Use appropriate self-contained breathing apparatus when any material is involved in a fire.

**FLASH POINT:**

Not combustible (does not burn). Be aware that calcium hypochlorite can decompose violently at temperatures above 100°C, releasing heat and oxygen gas.

**UPPER FLAMMABLE LIMIT:** Not applicable.**LOWER FLAMMABLE LIMIT:** Not applicable.

**FIRE AND EXPLOSION DATA**

**AUTO IGNITION TEMPERATURE:** Not applicable.

**HAZARDOUS COMBUSTION PRODUCTS:** Oxygen, chlorine, and chlorine monoxide.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Use water only. Drench with water and cool surrounding products and area with water. Water in contact with hot hypochlorites can release Hydrochloric acid or chlorine gas. Use appropriate self-contained breathing apparatus when any material is involved in a fire.

**EXPLOSION HAZARDS:**

Powerful oxidizing material. With acids, evolves chlorine at ambient temperatures. On combustion, and with subsequent decomposition, evolves oxygen at higher temperatures. Readily ignites combustible materials and strong reducing agents when in contact. May undergo accelerated decomposition with evolution of heat. Contamination or mixing with any foreign material may result in a fire of great intensity.

**REACTIVITY DATA**

**STABILITY:** Stable (up to 180 °C).

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBILITY:**

AMMONIA, UREA AND AMINES - form reactive, toxic chloramines.

ACIDS - release chlorine gas.

METAL OXIDES - can react violently.

**HAZARDOUS REACTIONS/DECOMPOSITIONS:**

Calcium hypochlorite is a strong oxidizing agent. Mix only into water.

Contamination may start a chemical reaction with generation of heat, liberation of hazardous gases, and possible fire and explosion.

**CONDITIONS TO AVOID:**

Calcium hypochlorite should be kept away from household soap, suntan lotions, paint products, solvents, acids, beverages, lighted cigarettes, combustible materials, garbage, dirt, dirty rags, organic materials, and other pool chemicals. Mixing with any of the above materials can initiate a hazardous decomposition of calcium hypochlorite. Calcium hypochlorite should not be mixed with anything but water.

**HEALTH HAZARD DATA**

**INHALATION:**

Dust and mist irritate the nose and throat. When mixed with acids, chlorine gas is released. This gas causes irritation of the respiratory tract. Prolonged exposure to high concentrations of chlorine gas may result in severe lung damage.

**SKIN CONTACT:**

Calcium hypochlorite dust and solutions can cause irritation, and in severe cases, chemical burns.

**EYE CONTACT:**

Exposure to calcium hypochlorite can cause eye irritation. Concentrated solutions cause burns which may result in permanent eye damage if not promptly treated.

**INGESTION:**

When ingested, there will be burning in the mouth and throat. Calcium Hypochlorite can cause abdominal cramps and nausea which may lead to convulsions, coma, and death.

**CHRONIC EXPOSURE EFFECTS:**

Skin irritation may occur from repeated or prolonged skin contact.

**EXPOSURE LIMITS:** (TLV-TWA) Not available.

**IRRITANCY:** Not available.

**MUTAGENICITY:** Not available.

**CARCINOGENICITY:** Not carcinogenic (IARC and ACGIH).

**HEALTH HAZARD DATA**

**SENSITIZATION TO PRODUCT:** Not available.

**REPRODUCTIVE TOXICITY:** Not available.

**TOXICOLOGICALLY SYNERGISTIC MATERIALS:** Not available.

**TERATOGENICITY DATA:** Not available.

**ANIMAL TOXICITY DATA:**

LC<sub>50</sub>: (Inhalation, rats) - 148 mg/l (65% Calcium Hypochlorite)

LD<sub>50</sub>: (Oral, rats) - 1300 mg/kg (65% Calcium Hypochlorite)

**OTHER HEALTH EFFECTS:** None known.

**FIRST AID MEASURES****INHALATION:**

Remove source of contamination or move victim to fresh air. If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Obtain medical attention immediately.

**SKIN CONTACT:**

As quickly as possible, flush contaminated area with lukewarm, gently running water for at least 15 minutes. Under running water, remove contaminated clothing, shoes, and leather goods. Obtain medical attention immediately.

**EYE CONTACT:**

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes, holding the eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Obtain medical attention immediately.

**INGESTION:**

Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. Do not induce vomiting. Have victim drink one cup (240-300 ml, 8-10 oz.) of water to dilute material in stomach. If vomiting occurs naturally, rinse mouth and repeat administration of water. If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Obtain medical attention

**PREVENTATIVE MEASURES****RESPIRATORY PROTECTION:**

Dust mask or NIOSH approved canister type respirators suitable for chlorine.

**SKIN PROTECTION:**

Impervious gloves, body suits, boots, and/or other resistant protective clothing. Have a safety shower/eye wash fountain readily available in the immediate work area.

**EYE/FACE PROTECTION:**

Chemical safety goggles. A face shield may be necessary.

**SPECIAL HANDLING PROCEDURES:**

Avoid generating dust. Avoid mixing pure material with contaminated material. Use smallest possible amounts in designated areas with adequate ventilation.

**STORAGE REQUIREMENTS:**

Store in original container. Store tightly closed containers in a clean, cool, open or well ventilated area. Keep out of sun.

**ENGINEERING CONTROLS:**

Local exhaust ventilation required where exposure to dust might occur.

**SPECIAL SHIPPING REQUIREMENTS:**

Transportation in Canada is governed by Transport Canada. Refer to the Transportation of Dangerous Goods (TDG) Regulations for special shipping requirements for calcium hypochlorite. Transport in the U.S. is governed by the Department of Transport (DOT). Refer to DOT regulations (CFR 49) for special shipping requirements for calcium hypochlorite (UN1748).

**ENVIRONMENTAL PROTECTION DATA****STEPS IN THE EVENT OF A LEAK OR SPILL:**

Restrict access to area until completion of cleanup. Wear adequate personal protective equipment. Extinguish or remove all ignition sources. Ventilate area. Do not touch spilled material. Prevent material from entering sewers or confined spaces. Shovel into clean, dry, labelled containers. Flush area with water. Contaminated materials may be dissolved in water then treated with a reducing agent such as sodium sulphite. Care should be taken handling contaminated materials due to fire risk.

**ENVIRONMENTAL EFFECTS:**

Harmful to aquatic life in low concentrations.

**DEACTIVATING CHEMICALS:**

Sodium sulphite, Sodium bisulphite, or hydrogen peroxide can be used. Do not use acids, since chlorine gas will be liberated.

**WASTE DISPOSAL METHODS:**

Consult appropriate Federal, State/Provincial, and local regulatory authorities to ascertain proper disposal procedures. Care should be taken not to mix waste calcium hypochlorite with incompatible material. Calcium hypochlorite should be dissolved in water, and the available chlorine treated using a reducing agent such as sodium sulphite.

**PREPARATION INFORMATION**

**MSDS PREPARED BY:** Technical Department  
PrairieChem Inc.

**TELEPHONE NUMBER:** (306) 664-2522

**DATE PREPARED/REVISED:** December 13, 1991

**DATE PRINTED:** November 7, 1991

**REFERENCES:**

1. Manufacturer's MSDS and publications of the Chlorine Institute Inc.
2. Hawley, Gessner G. "The Condensed Chemical Dictionary, Tenth Edition" (Van Nostrand Reinhold Co.) 1981.

## 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 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
Components	Species		Test Results
2-(2-butoxyethoxy)ethanol (CAS 112-34-5)			
<b>Aquatic</b>			
Fish	LC50	Bluegill (Lepomis macrochirus)	1300 mg/l, 96 hours
Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)			
<b>Aquatic</b>			
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

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