



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name SHORE PAC®
Version # 12
Revision date 30-March-2011
Chemical name Copolymer of Sodium Acrylate and Acrylamide
Chemical description Powder
CAS # Mixture
Manufacturer information CETCO
Drilling Products Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 US
safetydata@amcol.com
<http://www.cetco.com/>
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Emergency overview Health injuries are not known or expected under normal use. No hazards resulting from the material as supplied.

OSHA regulatory status This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

- Eyes** Contact with eyes may cause irritation.
- Skin** This product may cause irritation to the skin.
- Inhalation** Inhalation of dusts may cause respiratory irritation.
- Ingestion** Health injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

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

4. First Aid Measures

First aid procedures

- Eye contact** Flush eyes with water as a precaution. Get medical attention if irritation develops or persists.
- Skin contact** Wash off with soap and water. Launder contaminated clothing before reuse. Get medical attention if irritation develops or persists.
- Inhalation** Remove to fresh air. Call a physician if symptoms develop or persist.
- Ingestion** Have victim rinse mouth thoroughly with water. If ingestion of a large amount does occur, seek medical attention.

General advice If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Extinguishing media

- Suitable extinguishing media** Small Fires: Dry chemical, CO2, water spray or regular foam.
Large Fires: Water spray, fog or regular foam.

Fire fighting equipment/instructions Not available.

6. Accidental Release Measures

Environmental precautions Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation. Small Dry Spills: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

7. Handling and Storage

Handling Handle and open container with care. Minimize dust generation and accumulation.

Storage Keep the container tightly closed and dry.

8. Exposure Controls / Personal Protection

Personal protective equipment

Eye / face protection Avoid contact with eyes. Wear dust goggles.

Skin protection Not normally needed. Wear suitable protective clothing.

Respiratory protection No personal respiratory protective equipment normally required. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

9. Physical & Chemical Properties

Appearance Free flowing wettable powder.

Physical state Solid.

Form Solid. Powder.

Color White.

Odor Not available.

Odor threshold Not available.

pH Not available.

Vapor pressure Not available.

Vapor density Not available.

Boiling point Not available.

Melting point/Freezing point Not available.

Solubility (water) Not available.

Specific gravity Not available.

Relative density Not available.

Flash point Not available.

Flammability limits in air, upper, % by volume Not available.

Flammability limits in air, lower, % by volume Not available.

Auto-ignition temperature Not available.

VOC 0 % estimated

Percent volatile 0 % estimated

10. Chemical Stability & Reactivity Information

Chemical stability Stable at normal conditions.

Conditions to avoid Not available.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products Upon decomposition, this product may yield oxides of nitrogen and ammonia, carbon dioxide, carbon monoxide and other low molecular weight hydrocarbons.

Possibility of hazardous reactions Will not occur.

11. Toxicological Information

Further information This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicity This material is not expected to be harmful to aquatic life.

Environmental effects Ecological injuries are not known or expected under normal use.

Persistence and degradability Not available.

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

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.
CERCLA/SARA Hazardous Substances - Not applicable.

OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated

DEA Essential Chemical Code Number

Not regulated

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

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

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name SODA ASH
Version # 08
Revision date 09-February-2009
CAS # 497-19-8
Synonym(s) DISODIUM CARBONATE * SODIUM CARBONATE
Manufacturer CETCO
Drilling Products Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 US
safetydata@amcol.com
<http://www.cetco.com/>
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Potential health effects

Eyes Contact may irritate or burn eyes.
Skin Prolonged and/or repeated skin contact may result in mild irritation or redness.
Inhalation Inhalation of dusts may cause respiratory irritation.
Ingestion Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

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

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 20 minutes. If irritation persists get medical attention.
Skin contact Wash affected area with mild soap and water. Get medical attention if irritation develops or persists. Launder contaminated clothing before reuse.
Inhalation Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. If symptoms persist, get medical attention.
Ingestion Give several glasses of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

Notes to physician Provide general supportive measures and treat symptomatically.

5. Fire Fighting Measures

Flammable properties This material will not burn.

Extinguishing media

Suitable extinguishing media Use any media suitable for the surrounding fires.

Protection of firefighters

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Hazardous combustion products Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

6. Accidental Release Measures

Environmental precautions	Runoff from fire control or dilution water may cause pollution. Do not let product enter drains. Do not flush into surface water or sanitary sewer system.
Methods for containment	Stop leak if you can do so without risk.
Methods for cleaning up	Vacuum or sweep up material and place in a disposal container. Avoid the generation of dusts during clean-up. After removal flush contaminated area thoroughly with water. Do not flush to sewer.

7. Handling and Storage

Handling	Keep formation of airborne dusts to a minimum. Do not get this material in contact with skin or eyes. Wash hands before eating.
Storage	Keep tightly closed in a dry, cool and well-ventilated place.

8. Exposure Controls / Personal Protection

Exposure guidelines	Contains no substances with occupational exposure limit values.
Engineering controls	Good general ventilation should be sufficient to control airborne levels.
Personal protective equipment	
Eye / face protection	Wear safety glasses with side shields.
Skin protection	Normal work clothing (long sleeved shirts and long pants) is recommended. Use impervious gloves.
Respiratory protection	Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
General hygiene considerations	Use good industrial hygiene practices in handling this material. Keep away from food, drink and animal feeding stuffs. Keep away from tobacco products. Wash hands before breaks and immediately after handling the product.

9. Physical & Chemical Properties

Appearance	Granular.
Color	White. or Off-white.
Odor	None.
Odor threshold	Not available.
Physical state	Solid.
Form	Powder. or granular
pH	11.3 - 11.5 (1% aqueous solution)
Melting point	1563.8 °F (851 °C) estimated
Freezing point	Not available.
Boiling point	2912 °F (1600 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	2.4002 - 2.53 @ 20 C
Relative density	2.4 g/cm ³ estimated
Solubility (water)	220 g/L
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	0 % estimated

Bulk density	> 1 g/cm ³ @ 20 °C
Percent volatile	0 % estimated
Molecular weight	105.9900
Molecular formula	Na ₂ CO ₃

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	High temperatures.
Incompatible materials	Fluorine. Moist air. Acids. Sulfuric acid. finely divided aluminium
Hazardous decomposition products	Carbon oxides.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Acute effects	Acute eye irritation/corrosion Mild skin irritation
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12. Ecological Information

Ecotoxicity	This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Environmental effects	No data available for this product. Based on the physical properties of this product, significant environmental persistence and bioaccumulation would not be expected.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.
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14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.
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CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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Section 302 extremely hazardous substance	No
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Section 311 hazardous chemical	No
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Food and Drug Administration (FDA)	Total food additive GRAS food additive
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Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
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)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

16. Other Information

Further information This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS ratings



NFPA ratings
 Health: 2
 Flammability: 0
 Instability: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date 09-February-2009

Other information CETCO is an AMCOL International company.



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name SLURRY BUSTER™ DRY
Version # 02
Revision date 30-March-2011
Chemical description Hypochlorite
CAS # Mixture
Manufacturer information CETCO
Drilling Products Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 US
safetydata@amcol.com
<http://www.cetco.com/>
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Emergency overview Toxic by inhalation. Corrosive to skin and eyes. Strong oxidizer.

Potential health effects

Eyes This product causes eye burns. Symptoms include itching, burning, redness and tearing. Risk of corneal damage.

Skin Dust has an irritating effect on moist skin. Substance is corrosive. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Inhalation Dust may irritate throat and respiratory system and cause coughing. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Prolonged inhalation may be harmful. Intentional misuse by concentrating and inhaling the product can be harmful or fatal.

Ingestion Corrosive and may cause severe and permanent damage to mouth, throat, and stomach.

3. Composition / Information on Ingredients

Components	CAS #	Percent
CALCIUM HYPOCHLORITE, DRY	7778-54-3	60 - 80
CALCIUM CHLORIDE	10043-52-4	2.5 - 10
CALCIUM HYDROXIDE	1305-62-0	2.5 - 10
CARBONIC ACID, CALCIUM SALT (1:1)	471-34-1	2.5 - 10

Composition comments Occupational Exposure Limits for constituents are listed in Section 8.

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately.

Skin contact Wash off with soap and water. Wash off immediately with plenty of water for at least 15 minutes. Remove and isolate contaminated clothing and shoes. Launder contaminated clothing before reuse. Get medical attention if irritation develops or persists.

Inhalation Move to fresh air. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Call a physician if symptoms develop or persist.

Ingestion If swallowed, do NOT induce vomiting. Have victim rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

5. Fire Fighting Measures

Flammable properties Containers may explode when heated. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing media

Suitable extinguishing media Water spray, fog or mist.

Protection of firefighters

Protective equipment and precautions for firefighters In the event of fire, wear self-contained breathing apparatus.

Fire fighting equipment/instructions

Move containers from fire area if you can do it without risk. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.

Hazardous combustion products

Fire may produce irritating, corrosive and/or toxic gases.

6. Accidental Release Measures

Personal precautions

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Ventilate closed spaces before entering them. Avoid inhalation of vapor, fumes, dust and/or mist from the spilled material.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Runoff from fire control or dilution water may cause pollution. Contact local authorities in case of spillage to drain/aquatic environment. US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

Methods for containment

Dike the spilled material, where this is possible. Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After removal flush contaminated area thoroughly with water. Keep in suitable, closed containers for disposal.

7. Handling and Storage

Handling

Handle and open container with care. Do not get this material in your eyes, on your skin, or on your clothing. Do not breathe gas/fumes/vapor/spray. Keep away from heat and flame. "Empty" containers retain product residue (liquid or vapor) and can be dangerous.

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing. Store between 5°C and 35°C. Do not store in direct sunlight. Keep away from heat and sources of ignition. Do not store near acids. Vent container carefully, as needed to relieve pressure.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
CALCIUM HYDROXIDE (1305-62-0)	TWA	5.0000 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM HYDROXIDE (1305-62-0)	PEL	15.0000 mg/m3	Total dust.
		5.0000 mg/m3	Respirable fraction.

Engineering controls

The risk of inhalation of dust must be minimized as much as possible. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Personal protective equipment

Eye / face protection Wear chemical goggles and face shield.

Skin protection The use of neoprene gloves is recommended. Use of an impervious apron is recommended. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection The risk of inhalation of dust must be minimized as much as possible. If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs. When using, do not eat, drink or smoke.

Eye wash fountain and emergency showers are recommended. Launder contaminated clothing before reuse.

9. Physical & Chemical Properties

Appearance	Powder.
Physical state	Solid.
Form	Free flowing wettable powder.
Color	White.
Odor	Chlorine.
Odor threshold	Not available.
pH	10.4 - 10.8
Vapor pressure	0.1577 hPa estimated
Vapor density	Not available.
Boiling point	2760.8 °F (1516.25 °C) estimated
Melting point/Freezing point	521.6 °F (271.667 °C) estimated
Solubility (water)	18 mg/l
Specific gravity	2.06038 estimated
Relative density	Not available.
Flash point	Not flammable
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
VOC	0 % estimated
Percent volatile	0 % estimated
Molecular weight	143
Other data	
Density	0.8 g/cm ³ 2.06018 g/cm ³ estimated

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal temperature conditions. To avoid thermal decomposition, do not overheat.
Conditions to avoid	High temperatures. Avoid temperatures above 95°F (35°C). Exposure to moisture.
Incompatible materials	This product reacts with acids. This product may react with strong reducing agents. Reaction with water or moist air will release toxic, corrosive or flammable gases.
Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapors. May develop chlorine if mixed with acidic solutions.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information**Toxicological data****Product**

SLURRY BUSTER™ DRY (Mixture)

Test Results

Acute Dermal LD50 Rabbit: 50550 mg/kg

Acute Dermal LD50 Rat: 58780.1 mg/kg estimated

Acute Oral LD50 Mouse: 24695.1 mg/kg estimated

Acute Oral LD50 Rat: 1178.99 mg/kg estimated

Acute Other LD50 Mouse: 895.338 mg/kg estimated

Components	Test Results
CALCIUM CHLORIDE (10043-52-4)	Acute Dermal LD50 Rat: 2630 mg/kg Acute Oral LD50 Rat: 1000 mg/kg Acute Other LD50 Mouse: 42 mg/kg Acute Oral LD50 Rat: 7340 mg/kg
CALCIUM HYDROXIDE (1305-62-0)	Acute Oral LD50 Mouse: 6450 mg/kg
CARBONIC ACID, CALCIUM SALT (1:1) (471-34-1)	Acute Oral LD50 Rat: 6450 mg/kg Acute Dermal LD50 Rabbit: 2000 mg/kg
CALCIUM HYPOCHLORITE, DRY (7778-54-3)	Acute Oral LD50 Rat: 850 mg/kg
Sensitization	Not a skin sensitizer.
Acute effects	Corrosive effects. Dust may irritate the eyes and the respiratory system.
Carcinogenicity	Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Teratogenicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

12. Ecological Information

Ecotoxicological data

Product	Test Results
SLURRY BUSTER™ DRY (Mixture)	EC50 Daphnia: 1.2981 mg/l 48.00 hours estimated LC50 Fish: 0.2702 mg/l 96.00 hours estimated

Components	Test Results
CALCIUM CHLORIDE (10043-52-4)	EC50 Daphnia: 52 mg/L 48.00 Hours LC50 Fathead minnow (Pimephales promelas): 3930 - 5360 mg/l 96.00 hours LC50 Fish: 10650 mg/L 96.00 Hours
CALCIUM HYDROXIDE (1305-62-0)	LC50 Fish: 160 mg/L 96.00 Hours LC50 Zambezi barbel (Clarias gariepinus): 33.8844 mg/l 96.00 hours
CARBONIC ACID, CALCIUM SALT (1:1) (471-34-1)	LC50 Western mosquitofish (Gambusia affinis): > 56000 mg/l 96.00 hours
CALCIUM HYPOCHLORITE, DRY (7778-54-3)	EC50 Rotifer (Philodina acuticornis): 0.07 mg/l 48.00 hours LC50 Channel catfish (Ictalurus punctatus): 0.026 - 0.145 mg/l 96.00 hours LC50 Fish: 0.5 mg/L 96.00 Hours
Ecotoxicity	Dangerous for the environment. Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the environment.
Environmental effects	Harmful to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not available.

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations. Do not allow this material to drain into sewers/water supplies.
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14. Transport Information

DOT

Basic shipping requirements:

UN number UN2880

Proper shipping name	Calcium hypochlorite, hydrated
Hazard class	5.1
Packing group	II
Additional information:	
Special provisions	165, 166, IB8, IP2, IP4, IP13, W9
Packaging exceptions	152
Packaging non bulk	212
Packaging bulk	240
ERG number	140

DOT

Packages less than 83 lbs

Basic shipping requirements:

UN number	UN2880
Proper shipping name	Calcium hypochlorite, hydrated
Hazard class	5.1
Packing group	II
Additional information:	
Special provisions	165, 166, IB8, IP2, IP4, IP13, W9
Packaging exceptions	152
Packaging non bulk	212
Packaging bulk	240
ERG number	140



DOT



DOT

Packages less than 83 lbs

15. Regulatory Information

US federal regulations OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))

Not regulated

DEA Essential Chemical Code Number

Not regulated

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Not regulated

DEA Exempt Chemical Mixtures Code Number

Not regulated

CERCLA (Superfund) reportable quantity

CALCIUM HYPOCHLORITE, DRY: 10.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

Section 302 extremely hazardous substance	No
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Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

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

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

CALCIUM HYDROXIDE (CAS 1305-62-0) Listed.
CALCIUM HYPOCHLORITE, DRY (CAS 7778-54-3) Listed.

16. Other Information

Further information This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS® ratings Health: 3
Flammability: 0
Physical hazard: 1

NFPA ratings Health: 3
Flammability: 0
Instability: 1
Special hazards: OX

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date 30-March-2011

16. Other Information

Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

Further information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS® ratings

Health: 0
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 0
Flammability: 0
Instability: 0

Disclaimer

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