

MATERIAL SAFETY DATA SHEET

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL MSDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE USA: 1-423-780-2970) 1-800-424-9300 (OUTSIDE

USA: 1-703-527-3887) 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: POOLIFE™ GRANULAR CHLORINATOR SHOCK

and SWIM

EPA Registration Number: 1258-1250

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204 REVISION DATE: 02/19/2008 SUPERCEDES: 02/18/2008

MSDS Number: 000000000757

SYNONYMS: None

CHEMICAL FAMILY: Hypochlorite Mixture
DESCRIPTION / USE: swimming pool sanitizer
FORMULA: Not Applicable/Mixture

2. HAZARDS IDENTIFICATION

OSHA Hazard
Classification:

Toxic by inhalation, Corrosive to eyes and skin, Lung toxin

Routes of Entry: Inhalation, skin, eyes, ingestion Chemical Interactions: No known or reported interactions.

Medical Conditions Aggravated: Asthma, respiratory and cardiovascular disease

Human Threshold Response Data

Odor Threshold Approximately 2.0 mg/m3 (based on odor threshold of chlorine)

Irritation Threshold Approximately 18-31 mg/m3 (based on irritation threshold of chlorine)

REVISION DATE: 02/19/2008 Page 1 of 13



Chemicals,

MATERIAL SAFETY **DATA SHEET**

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>PPI / Special</u> hazard.	y Physical / Instability	<u>Flammability</u>	<u>Health</u>	Hazard Ratings:
<u>liazaiu.</u>	1	0	3	HMIS
OX - NFPA Oxidizer Class: Meets the criteria of an NFPA Class 1	1	0	3	NFPA

Immediate (Acute) Health Effects

Inhalation Toxicity: HARMFUL IF PRODUCT IS INHALED IN HIGH CONCENTRATIONS.

CAUSES BURNS TO RESPIRATORY TRACT. Inhalation of dust or vapor from this product can be irritating to the nose, mouth, throat and lungs. In confined areas, mechanical agitation can result in high levels of dust, and reaction with incompatible materials (as listed in Section 10) can result in high concentrations of chlorine vapor, either of which may result in burns to the respiratory tract, producing lung edema, shortness of breath, wheezing, choking, chest pains, impairment of lung function

and possible permanent lung damage.

DRY MATERIAL CAUSES MODERATE SKIN IRRITATION. WET Skin Toxicity:

MATERIAL CAUSES SKIN BURNS. Dermal exposure to dry material causes moderate skin irritation characterized by redness and swelling. Dermal exposure to wet material can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Prolonged

skin exposure may cause permanent damage.

Eye Toxicity: CAUSES BURNS TO EYES. Severe irritation and/or burns can occur

following eye exposure. Direct contact may cause impairment of vision

and corneal damage.

MODERATELY TOXIC IF SWALLOWED, CAUSES BURNS TO Ingestion Toxicity:

DIGESTIVE TRACT. Irritation and/or burns can occur to the entire

gastrointestinal tract, including the stomach and intestines,

characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding, and/or tissue ulceration or perforation. Significant exposure to this

material can lead to serious health effects and/or death.

Acute Target Organ 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.

Prolonged (Chronic) Health Effects

Inhalation:

Carcinogenicity: This product is not known or reported to be carcinogenic by any

reference source including IARC, OSHA, NTP or EPA.

No reproductive or developmental risk to humans is expected from Reproductive and

Developmental Toxicity: exposure to this product.

Repeated inhalation exposure may cause impairment of lung function

and permanent lung damage.

Effects similar to those from acute exposure. In addition, chronic Skin Contact:

exposure to wet material may cause effects secondary to tissue

destruction.

REVISION DATE: 02/19/2008 Page 2 of 13



MATERIAL SAFETY DATA SHEET

Ingestion: There are no known or reported effects from chronic ingestion except for

effects similar to those experienced from single exposure. The acute corrosivity of this product, makes chronic ingestion of significant

amounts unlikely.

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

sensitizer.

Chronic Target Organ Toxicity: There are no known or reported effects from repeated exposure except

those secondary to burns.

Supplemental Health Hazard

Information:

No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME	<u>CAS #</u>	% RANGE
CALCIUM HYPOCHLORITE	7778-54-3	51.11 - 54.4
SODIUM CHLORIDE	7647-14-5	0 - 3
SODIOM CHLORIDE	7047-14-5	0-3
CALCIUM CHLORATE	10137-74-3	0 - 4
CALCIUM CHLORIDE	10043-52-4	0 - 4
CALCIUM HYDROXIDE	1305-62-0	0 - 5
CALCIUM CARBONATE	471-34-1	0 - 4
MAGNESIUM SULFATE HEPTAHYDRATE	10034-99-8	29 - 31
MAGNESION SULFATE HEFTANTURATE	10034-33-0	29 - 31
Water	7732-18-5	17 - 22

4. FIRST AID MEASURES

General Advice: Call a poison control center or doctor for treatment advice. For 24-hour

emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a

poison control center or doctor, or going for treatment.

REVISION DATE: 02/19/2008 Page 3 of 13



MATERIAL SAFETY DATA SHEET

Inhalation: IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an

ambulance, then give artificial respiration, preferably 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.

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

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.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA): This product contains an ingredient (calcium hypochlorite) which is

both a strong oxidizer and is chemically reactive with many

substances. Strong oxidizers are capable of intensifying a fire once started. Because of this, any contamination of the product with other substances by spill or otherwise should be avoided. Also see section 7., Product is not known to be flammable, combustible or pyrophoric., NFPA Oxidizer Class: Meets the criteria of an NFPA

Class 1 Oxidizer

Flammable Properties

Flash Point: Not applicable Autoignition Temperature: Not applicable

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

compounds.

Fire Fighting Instructions: 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

6. ACCIDENTAL RELEASE MEASURES

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 repirator 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.

REVISION DATE: 02/19/2008 Page 4 of 13



Land Release:

Arch Chemicals, Inc.

MATERIAL SAFETY DATA SHEET

Water Release:	This product is heavier than wa	ater. This material is soluble in water.
----------------	---------------------------------	--

Monitor all exit water for available chlorine and pH. Advise local

authorities of any contaminated water 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 r

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.

7. HANDLING AND STORAGE

Shelf Life Limitations:

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.

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.

REVISION DATE: 02/19/2008 Page 5 of 13



MATERIAL SAFETY DATA SHEET

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.

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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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.

Protective Equipment for Routine Use of Product

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: Nitrile, Natural rubber, Neoprene (This includes: gloves, boots, apron,

protective suit)

Exposure Limit Data

CHEMICAL NAME CALCIUM HYPOCHLORITE	<u>CAS #</u> 7778-54-3	Name of Limit ARCH-ROEG*	<u>Exposure</u> 1 mg/m3 TWA
CALCIUM HYPOCHLORITE	7778-54-3	NIOSH-IDLH	37 - 48 mg/m3 based on IDLH concentration of chlorine
CALCIUM HYDROXIDE	1305-62-0	ACGIH	5 mg/m3 TWA
CALCIUM HYDROXIDE	1305-62-0	OSHA Z1	5 mg/m3 PEL Respirable fraction.
CALCIUM HYDROXIDE	1305-62-0	OSHA Z1	15 mg/m3 PEL Total dust.
CALCIUM CARBONATE	471-34-1	ACGIH	10 mg/m3 TWA The value is for particulate matter containing no asbestos and <1% crystalline silica.
CALCIUM CARBONATE	471-34-1	OSHA Z1	15 mg/m3 PEL Total dust.

REVISION DATE: 02/19/2008 Page 6 of 13



Arch Chemicals,

MATERIAL SAFETY **DATA SHEET**

CALCIUM CARBONATE 471-34-1 OSHA Z1 5 mg/m3 PEL Respirable fraction.

*ARCH-ROEG: Arch Recommended Occupational Exposure Guideline.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: solid Form aranules Color: white

Odor: Chlorine-like

Molecular Weight: (Active ingredient)143.00

Specific Gravity: Not applicable

10 - 10.8 (1% solution in neutral, distilled water) pH:

> (@ 25 Deg. C) Not applicable

Boiling Point: Freezing Point: Not applicable Melting Point: Not applicable

Density: 0.8q/cc

Vapor Pressure: (@ 25 Deg. C) Not applicable

Vapor Density: Not applicable Viscosity: Not applicable Fat Solubility: No data

Solubility in Water: Approximately 18% (@ 25 Deg. C) Product also

> contains calcium hydroxide and calcium carbonate which will leave a residue.

Partition coefficient n-

Not applicable

octanol/water:

Evaporation Rate: Not applicable

Oxidizing: Product has oxidizing properties.

Volatiles, % by vol.: Not applicable **VOC Content** Not applicable **HAP Content** Not applicable

10. STABILITY AND REACTIVITY

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 1 oxidizer. 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 can react violently to produce heat and toxic gases and spatter. Use copious amounts of water for fires involving this product.

Conditions to Avoid: 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. 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,

REVISION DATE: 02/19/2008 Page 7 of 13

Chemical Incompatibility:



MATERIAL SAFETY DATA SHEET

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 DEG°C - , 338 - 356 DEG°F-

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

CALCIUM LD50 (65% calcium hypochlorite) 850 mg/kg Rat

HYPOCHLORITE

Dermal LD50 value:

CALCIUM LD50 (65% calcium hypochlorite) > 2,000 mg/kg Rabbit

HYPOCHLORITE
SODIUM CHLORIDE LD50 > 10.000 ma/ka R

SODIUM CHLORIDE LD50 > 10,000 mg/kg Rabbit LD50 = 2,630 mg/kg Rat

CALCIUM HYDROXIDE No data

Inhalation LC50 value:

CALCIUM Inhalation LC50 1 h (65% calcium hypochlorite), (Nose Only) = 2.04 MG/L Rat

HYPOCHLORITE

CALCIUM Inhalation LC50 4 h (65% calcium hypochlorite), (Nose Only) = 0.51 MG/L Rat

HYPOCHLORITE SODIUM CHLORIDE Inhalation LC50 1 h > 42 MG/L Rat

CALCIUM CHLORIDE No data
CALCIUM HYDROXIDE No data

Product Animal Toxicity

Oral LD50 value: LD50 Approximately 1,200 mg/kg Rat

Dermal LD50 value: LD50 > 2,000 mg/kg Rabbit

value: Only) > 2.04 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 There are no known or reported effects from repeated exposure except those

Toxicity: secondary to burns.

Reproductive and Calcium hypochlorite has been tested for teratogenicity in laboratory

Developmental Toxicity: animals. Results of this study have shown that calcium hypochlorite is not a

teratogen.

CALCIUM CHLORIDE Not known or reported to cause reproductive or

REVISION DATE: 02/19/2008 Page 8 of 13



MATERIAL SAFETY DATA SHEET

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 nonclastogenic 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

CALCIUM CHLORIDE

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

12. ECOLOGICAL INFORMATION

Ecological Toxicity Values for: CALCIUM HYPOCHLORITE

Bluegill - (nominal, static). 96 h LC50 0.088 mg/l Rainbow trout (Salmo gairdneri), - (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 - Dietary LC50 > 5,000 ppm - Oral LD50 3,474 mg/kg

Ecological Toxicity Values for: CALCIUM CHLORIDE

Bluegill - (nominal, static). 96 h LC50 = 10,650 mg/l

Mosquito fish - (nominal, static). 96 h LC50 = 13,400 mg/l Fathead minnow (Pimephales - (nominal, static). 96 h LC50 = 4,630 mg/l

(Group 3 Substance).

promelas),

Mallard ducklings

Bobwhite quail

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

REVISION DATE: 02/19/2008 Page 9 of 13

ÁRCH.

13. DISPOSAL CONSIDERATIONS

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 DOES NOT meet the criteria of a

hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it

listed as a hazardous waste under Subpart D.

Disposal Methods: As a nonhazardous waste, it should be disposed of in accordance

with local, state and federal regulations.

14. TRANSPORT INFORMATION

Land (US DOT): NA3077 OTHER REGULATED SUBSTANCES, SOLID, NOS (CALCIUM

HYPOCHLORITE) 9 III

Water (IMDG): UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.,

(CALCIUM HYPOCHLORITE) 9 III

Flash Point: Not applicable

Air (IATA): UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.,

(CALCIUM HYPOCHLORITE) 9 III

Emergency Response Guide Number: ERG # 171

Transportation Notes: THIS MATERIAL IS REGULATED AS A DOT HAZARDOUS

MATERIAL ONLY IF PACKING CONTAINS 10 POUNDS OR GREATER OF CALCIUM HYPOCHLORITE. Under specific circumstances, this product can ship under two transport exceptions, Limited Quantity or Consumer Commodity. See Bill of Lading for proper shipping description. This material does not meet the definition of a DOT class 5.1 oxidizer.

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): This is an EPA registered pesticide.

EPA Pesticide Registration Number: 1258-1250

FIFRA Listing of Pesticide Chemicals

(40 CFR 180):

This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes

consistent with its labeling.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

Health Immediate (Acute) Health Hazard

REVISION DATE: 02/19/2008 Page 10 of 13



MATERIAL SAFETY DATA SHEET

Physical None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

SARA III Threshold Planning Quantity: None established

Reportable Quantity (49 CFR 172.101, Appendix):

CERCLA Reportable quantity: CALCIUM HYPOCHLORITE

Value: 10lbs

SARA III Reportable quantity: None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

SARA III De minimis concentration: None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112: CAA None established

CAA 112I None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS#	COMPONENT NAME
10137-74-3	CALCIUM CHLORATE
1305-62-0	CALCIUM HYDROXIDE
7778-54-3	CALCIUM HYPOCHLORITE

PENN RTK

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK

08 1989

CHLORIC ACID, CALCIUM SALT

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

PENN RTK

08 1989

CALCIUM HYDROXIDE (CA(OH)2)

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

REVISION DATE: 02/19/2008 Page 11 of 13



MATERIAL SAFETY DATA SHEET

PENN RTK 08 1989 HYPOCHLOROUS ACID, CALCIUM SALT

New Jersey:

CAS#	COMPONENT NAME
10137-74-3	CALCIUM CHLORATE
1305-62-0	CALCIUM HYDROXIDE

NJ RTK

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

NJ RTK

12 1989

Substance no. 0313

CALCIUM CHLORATE CHLORIC ACID, CALCIUM SALT

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

NJ RTK

12 1989

Substance no. 0322

CALCIUM HYDROXIDE

Massachusetts:

CAS#	COMPONENT NAME
10137-74-3	CALCIUM CHLORATE
1305-62-0	CALCIUM HYDROXIDE
7778-54-3	CALCIUM HYPOCHLORITE

MASS RTK

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK

04 1993

CALCIUM CHLORATE

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK

04 1993

CALCIUM HYDROXIDE

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

MASS RTK

04 1993

CALCIUM HYPOCHLORITE

California Proposition 65:

REVISION DATE: 02/19/2008 Page 12 of 13



MATERIAL SAFETY DATA SHEET

CAS # COMPONENT NAME

US CA CRT None established

US CA65CRT None established

WHMIS Hazard Classification:

WHMIS

Canada. Canadian Environmental Protection Act (CEPA). WHMIS Ingredient Disclosure List (Can. Gaz.,

Part II, Vol. 122, No. 2)

WHMIS 01 1988

Threshold limits: 1% English List no. 302 CALCIUM HYDROXIDE

16. OTHER INFORMATION

MSDS REVISION STATUS: Revised to meet the ANSI standard of 16 sections

SECTIONS REVISED: 1

Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, 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. ARCH CHEMICALS 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 MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT.

REVISION DATE: 02/19/2008 Page 13 of 13