Arch Chemicals, Inc.

MATERIAL SAFETY DATA SHEET

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS

PRODUCT NAME: **DRYTEC™ GRANULAR**
EPA Registration Number: 1258-427

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc.
501 Merritt 7 PO Box 5204
Norwalk, CT 06856-5204

REVISION DATE	04/17/2006
SUPERCEDES	
MSDS Number	000000002671
SYNONYMS	None
CHEMICAL FAMILY	Hypochlorite
DESCRIPTION / USE:	Sanitizer and Oxidizer
FORMULA	Not Applicable/Mixture

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	**Oxidizer, Toxic by inhalation., Corrosive, Eye and skin hazard, 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 1.4 mg/m3 (based on odor threshold of chlorine)
Irritation Threshold	Approximately 13-22 mg/m3 (based on irritation threshold of chlorine)

Hazardous Materials Identification System / National Fire Protection Association Classifications

Hazard Ratings :	Health	Flammability	Physical / Instability	PPI / Special hazard.
HMIS	3	0	1	
NFPA	3	0	1	OX

CALCIUM HYDROXIDE	1305-62-0	0 - 4
CALCIUM CARBONATE	471-34-1	0 - 5
Water	7732-18-5	5.5 - 10

4. FIRST AID MEASURES

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.
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 is chemically reactive with many substances. Any contamination of the product with other substances by spill or otherwise may result in a chemical reaction and fire., This product is a strong oxidizer which is capable of intensifying a fire once started., Product is not known to be flammable, combustible or pyrophoric.
Flammable Properties	
Flash Point:	Not applicable
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

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 pacakging clean and free of all contamination, including, e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc.
Shelf Life Limitations:	Shelf life (that is, the period of time before the product goes below stated label strength) is determined by storage time and temperatures. Do not store product at temperatures above 52 Deg.C (125 Deg.F). Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products.When stored under moderate temperature conditions, product will maintain stated label strength for approximately two years. Prolonged storage at 35 Deg.C (95 Deg.F) or above will significantly shorten the shelf life. Storage in a climate-controlled storage area or building is recommended in those areas where extremes of high temperature occur.
Incompatible Materials for Storage:	Do not allow product to come in contact with other materials, including e.g. other pool treatment products, acids, organic materials, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, all corrosive liquids, flammable or combustible materials, etc.
Do Not Store At temperatures Above:	Storage above this temperature may result in rapid decomposition, evolution of chlorine gas and heat sufficient to ignite combustible products. 52 °C / 125 °F

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation	Use local exhaust ventilation to minimize dust and chlorine level where industrial use occurs.Otherwise ensure good general ventilation.

Protective Equipment for Routine Use of Product

Respiratory Protection :	Wear a NIOSH approved respirator if dusts are created. NIOSH approved full face piece air-purifying respirator with chlorine cartridges and dust/mist prefilter.
Skin Protection :	Wear impervious gloves to avoid skin contact. Where industrial use occurs, full impermeable suit may be required.
Eye Protection:	Use safety glasses with side shields. Where industrial use occurs, chemical goggles may be required.
Protective Clothing Type:	Neoprene (This includes: gloves, boots, apron, protective suit)

Exposure Limit Data

CHEMICAL NAME	CAS #	Name of Limit	Exposure
CALCIUM HYPOCHLORITE	7778-54-3	ARCH-ROEG*	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

	Avoid storage at temperatures above 52 Deg. C (125 Deg. F)., Prevent ingress of humidity and moisture into container or package. Always close the lid.
Chemical Incompatibility:	This product is chemically reactive with many substances, including, e.g., other pool treatment products, acids, organics, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, corrosive , flammable or combustible materials.
Hazardous Decomposition Products	Chlorine
Decomposition Temperature:	170 °C - 180 °C , 338 °F- 356 °F

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

CALCIUM HYPOCHLORITE	LD50 (65% calcium hypochlorite) 850 mg/kg Rat
SODIUM CHLORIDE	LD50 = 3,000 mg/kg Rat
CALCIUM CHLORIDE	LD50 = 1,000 mg/kg Rat

Dermal LD50 value:

CALCIUM HYPOCHLORITE	LD50 (65% calcium hypochlorite) > 2,000 mg/kg Rabbit
SODIUM CHLORIDE	LD50 > 10,000 mg/kg Rabbit
CALCIUM CHLORIDE	LD50 = 2,630 mg/kg Rat

Inhalation LC50 value:

CALCIUM HYPOCHLORITE	Inhalation LC50 1 HOUR (65% calcium hypochlorite), (Nose Only) = 2.04 MG/L Rat
CALCIUM HYPOCHLORITE	Inhalation LC50 4 HOUR (65% calcium hypochlorite), (Nose Only) = 0.51 MG/L Rat
SODIUM CHLORIDE	Inhalation LC50 1 HOUR > 42 MG/L Rat
CALCIUM CHLORIDE	No data

Product Animal Toxicity

Oral LD50 value	LD50 850 mg/kg Rat
Dermal LD50 value	LD50 CAUSES BURNS TO EYES AND SKIN. > 2,000 mg/kg Rabbit
Inhalation LC50 value	LC50 1.00 HOUR Based on the acute inhalation toxicity for chlorine. Approximately 1.3 MG/L Rat
Subchronic / Chronic Toxicity	There are no known or reported effects from repeated exposure.

Reproductive and Developmental Toxicity	Calcium hypochlorite has been tested for teratogenicity in laboratory animals. Results of this study have shown that calcium hypochlorite is not a teratogen.
CALCIUM CHLORIDE	Not known or reported to cause reproductive or developmental toxicity.
Mutagenicity	Calcium hypochlorite has been tested in the Dominant lethal assay in male mice, and it did not induce a dominant lethal response. Calcium hypochlorite

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 meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D001.If this product becomes a waste, it will be a hazardous waste which is subject to the Land Disposal restrictions under 40 CFR 268 and must be managed accordingly.
Disposal Methods :	As a hazardous solid waste it should be disposed of in accordance with local, state and federal regulations.
Potential US EPA Waste Codes :	D001

14. TRANSPORT INFORMATION

Land (US DOT): UN2880 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE 5.1 II
Water (IMDG): UN2880 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, 5.1 II

Flash Point: Not applicable
Air (IATA): UN2880 CALCIUM HYPOCHLORITE, HYDRATED MIXTURE, 5.1 II
Emergency Response Guide Number: ERG # 140

Transportation Notes: THIS MATERIAL IS REGULATED AS A DOT HAZARDOUS MATERIAL. HAZARD LABEL/PLACARD: OXIDIZER REPORTABLE QUANTITY: 10 lbs. (Per 49 CFR 172.101, Appendix) Under specific circumstances, this product can ship under two transport exceptions, Limited Quantity or Consumer Commodity. See Bill of Lading for proper shipping description.

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA):	The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.
EPA Pesticide Registration Number:	1258-427
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):

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

CAS #	COMPONENT NAME