MATERIAL SAFETY DATA SHEET



Technology and Products That Offer Solutions

CALCIUM CHLORIDE SOLUTION

GET urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS. While the information and recommendations set forth herein are believed to be accurate, as of the date hereon, Great Eastern Technologies, L.L.C., makes no warranty with respect thereto and disclaims all liability from reliance thereon. The information contained herein represents our current data and best opinion as to the proper use and handling of this product under normal conditions. Any use of this product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any process is the responsibility of the user. The MSDS should not be construed as the sum total of all protective measures that may be taken. It is the responsibility of the employer to evaluate the information and to determine the extent of the hazard and what personal protective measures should be taken. The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.



SECTION 01

CHEMICAL PRODUCT AND COMPANY

Product Identification

Product Trade Name	: Calcium Chloride (20% - 45% CaCl ₂ Solution)
Chemical Name	: Mixture - Not Applicable
CAS #	: Mixture - Not Applicable
Chemical Family	: Aqueous solution of calcium chloride
Product Synonyms	: None
Product Use	: Set-time accelerator admixture for concrete
DOT Hazard Class	: Not Regulated

Company Identification

Great Eastern Technologies, L.L.C. 4407 S. Broad Street Yardville, New Jersey 08620 (609) 581-1587 Factory Phone Number (609) 581-0735 Fax Number

Emergency Number

Great Eastern Technologies, L.L.C. work hours are generally 8:00 a.m. to 5:00 p.m. Monday through Friday. The Emergency Number is the Factory Phone Number (609) 581-1587. The Emergency Number for office hours and non-office hours is (800) 424-9300 (CHEMTREC)

MSDS Number Publication Date	: GSM FM-600-08 : January, 2008	Cancels MSDS Number	: GSM FM-600-07	
SECTION 0	2	HAZARDOUS INGREDI	ENTS	

NA = Not Available				Exp	(See S osure Limits		nplete Chemical Nar
Ingradiant	Maximum	OS PEL	HA-PEL STEL	AĊ	GIH-TLV STEL	IDLH	Other
Ingredient	by Weight			<u></u>			Other
Calcium Chloride CAS Number 10043-52-4	20-45%	NA	NA	0	0	NA	NA

SECTION 03	EMERGENCY HAZARDS IDENTIFICATION
Emergency Overview	: Calcium Chloride is a clear liquid (<i>sometimes slightly turbid in appearance</i>) with little to no odor. This product is not flammable. Avoid contact with skin or broken skin. Do not allow contact with Methyl vinyl products (<i>possibly causing runaway polymerization</i>), and/or Zinc, Galvanized Iron products (<i>may yield hydrogen gas, which may explode</i>).
	cause skin irritation. Under conditions of prolonged contact or when moisture is present, superficial burns results. Contact with abraded or broken skin can cause severe necrosis.
Eyes : May	irritate or burns eyes.
Inhalation : Mist	or vapor inhalation may irritate the nose, throat and lungs. May cause nose bleeds.
Ingestion : Low	in toxicity. May irritate gastrointestinal tract, cause nausea and vomiting.
Injection : No in	nformation available.
	ary hazard associated with this product is prolonged skin contact or prolonged contact with abraded or in, possible causing severe necrosis.
TARGET ORGANS :	ACUTE: No information available. CHRONIC: No information available. None established by OSHA (see Section 11 Toxicological Information for more details)
SECTION 04	FIRST AID MEASURES
Constantinated in dividual	a must be taken for medical attention if any advance reaction ecoure. Take a conv of Draduat Label and

Contaminated individuals must be taken for medical attention if any adverse reaction occurs. Take a copy of Product Label and MSDS to a health professional with the contaminated individual.

- Skin : If this product contaminates the skin, begin decontamination with running water. Remove exposed or contaminated clothing, wash contaminated clothing before reuse. Victim must seek immediate medical attention if any adverse effect occurs.
- **Eyes** : If this product liquid or vapors enter the eyes, open contaminated individual's eyes under gently running water. Use sufficient force to open eyelids. Have contaminated individual "roll" eyes. Minimum flushing is for 15 minutes. Contaminated individual must seek immediate attention.
- Inhalation : If vapors, mist, or spray of this product are inhaled, remove contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover contamination to avoid exposure to rescuers.
- Ingestion : If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If conscious, immediately give 2 to 4 glasses of water, and induce vomiting. If professional advice is not available, do not inducing vomiting or give diluents (*water*) to someone who is unconscious, having convulsion, or unable to swallow.

Medical Conditions Aggravated by Exposure : This product is not known to aggravate pre-existing dermatitis, or other skin disorders, and conditions involving the other Target Organs (See Section 3, Hazard Identification) may be aggravated by over-exposure to this product.

FIRE FIGHT MEASURES SECTION 05 Flash Point : Not Flammable Flammable Limits : Not Flammable Explosion Sensitivity to Static Discharge : Not Sensitive **Explosion Sensitivity to Mechanical Impact** : Not Sensitive **Auto Ignition Temperature** : Not Available Extinguishing Media : Water Spray Yes : Carbon Dioxide Yes : Dry Chemical : Halon Yes Yes : Other Any "ABC: Class : Foam Yes **Special Fire Fighting Procedures :** This product is not flammable. Use any agent suitable for the surrounding fire. Fire and Explosion Hazards : Do not allow contact with Methyl vinyl products (possibly causing runaway polymerization), and/or Zinc, Galvanized Iron products (may yield hydrogen gas, which may explode).

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Notes to Physicians : None

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SECTION 06

ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spilled liquid with sand or earth. Dilute spills cautiously with plenty of water. Place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways.

SECTION 07

HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Use normal personal hygiene and housekeeping. Store in room temperature dry area from other incompatible materials. Do not allow contact with Methyl vinyl products (*possibly causing runaway polymerization*), and/or Zinc, Galvanized Iron products (*may yield hydrogen gas, which may explode*).

SECTION 08	EXPOSURE CONTROLS, PERSONAL PROTECTION		
Respiratory Protection	: For misty conditions use NIOSH/MSHA approved respirators.		
Ventilation Requirements	: Ventilate as necessary to eliminate from the work area.		
Skin Protection Eye Protection	 Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from liquid. For misty conditions or when handling the solution where there is reasonable probability of eye contact, wear chemical safety goggles and hat. Under these conditions, do not wear contacts. 		
Work, Hygienic Practices	: As required to protect skin and eyes from liquid, safety showers and/or eye wash should be available. Do leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.		
Exposure Limits	: None Established.		

SECTION 09	PHYSICAL AND CHEMICAL PROPERTIES			
Specific Gravity	: 20% = 1.19	Boiling Point @ EF	: 20% = 221EF	
Specific Gravity	: 34% = 1.34	Boiling Point @ EF	: 34% = 238EF	
Specific Gravity	: 45% = 1.47	Boiling Point @ EF	: 45% = 257EF	
pH Level approximate	: 8.5	Appearance	: Clear to slightly turbid liquid	
Viscosity (cps)	: Not Available	Percent Volatile	: Not Applicable	
Flash Point @ EF	: Not Applicable	Ignition Point @ EF	: Not Applicable	
Freezing Point @ EF	: Not Applicable	Odor	: Odorless	
Explosion Hazard	: Not Applicable	Melting Point @ EF	: Not Applicable	
Vapor Pressure (MM Hg)	: Not Applicable	Vapor Density	: Not Applicable	
Evaporation Rate	: Not Applicable	Solubility in Water	: Compete	

SECTION 10

STABILITY AND REACTION

Chemical Stability	: Stable under normal temperatures.
Keep Away From	: Do not allow contact with Methyl vinyl products (possibly causing runaway polymerization), and/or Zinc, Galvanized Iron products (may yield hydrogen gas, which may explode).
Hazardous Polymerization	: Will not occur under normal conditions.
Hazardous Decomposition Products	: Fumes of Chloride are given off at temperatures above 2900E F

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SECTION 11

TOXICOLOGICAL INFORMATION

Ingredient	(See Section 2 for Exposure Limits)
(Chemical Name, CAS #, Cor	nmon Name) Toxicity Data
Calcium Chloride Solution	CAS Number 10043-52-4
LD50 (Rat) 1.4g/kg	
Suspected Cancer Agent :	The components of this product are not found on the following list: U.S. Federal OSHA Z List, NTP, IARC and CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer causing agents by these agencies.
Irritancy of Product :	Calcium Chloride is irritating to contaminated tissue.
Sensitization of Product :	Not information available
Reproductive Toxicity :	This product is not reported to cause mutagenic, embryotoxic, teratogenic effects in humans. This product is not reported to cause reproductive toxicity effects in humans. (see <i>definitions in Section 16 Other</i>)
ACGIH Exposure Indices :	Currently, there are no ACGIH Biological Indices (BEIs) determined for the components of Calcium Chloride.

Notation of Definitions:

A <u>mutagen</u> is a chemical which causes permanent changes to genetic material (*DNA*) such that the changes will propagate through generational lines. An <u>embryotoxin</u> is a chemical change which causes damage to a developing "embryo" (i.e within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A <u>teratogen</u> is a chemical which causes damage to a developing "fetus", but the damage does not propagate across generational lines. A <u>teratogen</u> is a chemical which causes damage to a developing "fetus", but the damage does not propagate across generational lines. A <u>teratogen</u> is any substance which interferes in any way with the reproductive process.

ECOLOGICAL INFORMATION

All work practices must be aimed at eliminating environmental contamination.

Environmental Stability

The components of this product are relatively stable under ambient, environmental conditions.

Effects of Material on Plants or Animals

This product may be harmful to terrestrial plant or animal life, especially if released in large quantities.

Effects of Chemical on Aquatic Life

TLm96: over 1,000 ppm (anhydrous) This product may be harmful to aquatic plant or animal life, especially of release in large quantities.

SECTION 13

DISPOSAL CONSIDERATIONS

Consult all Federal, State, Provincial and Local regulations, or a qualified waste disposal firm when characterizing waste for disposal. Dispose of waste in accordance with all applicable regulations.

U.S. EPA (40 CFR 261) : No information available

U.S EPA (40 CFR 116-117) Clean Water Act Section 311 : None Hazardous

RCRA Waste # : Not a hazardous waste

SECTION 14

TRANSPORTATION INFORMATION

 Department of Transportation Shipping Name
 : Not Regulated

 Hazard Class
 : Not Applicable

 Identification #
 : Not Applicable

 Label (s) Required
 : Not Applicable

 Surface Freight Classification
 : Concrete or Masonry Concrete Chemical Additive

SECTION 15

REGULATORY INFORMATION

OSHA Status TSCA Status CERCLA Reportable Requirements SARA Title III Information

- : No information available : No information available
- : No information available
- : No information available

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