

MATERIAL SAFETY DATA SHEET

CHEMSTRONG® CI

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 : Chemstrong® CI
Chemical Name : Mixture - Not Applicable
CAS # : Mixture - Not Applicable
Chemical Family : Chemical Dispersing Agent
Product Synonyms : None
Product Use : Corrosion inhibiting admixture for steel reinforced concrete
DOT Hazard Class : Not Regulated

Company Identification

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

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 : GSM FM-200-08

Cancels MSDS Number : GSM FM-200-07

SECTION 02

HAZARDOUS INGREDIENTS

(See Section 11 for Complete Chemical Names)

Ingredient	Maximum by Weight	Exposure Limits in Air				Other
		OSHA-PEL		ACGIH-TLV		
		PEL	STEL	TLV	STEL	IDLH
Calcium Nitrite CAS Number 13780-06-8	25-34%	None Established		None Established		None Established
Calcium Nitrate Tetra hydrate CAS Number 10124-37-5	<5.00%	None Established		None Established		None Established

SECTION 03

EMERGENCY HAZARDS IDENTIFICATION

Emergency Overview : This product is a clear to light transparent yellow liquid that typically emanates off no odor. Its primary route of contamination is dermal, eyes and ingestion. Moderate irritant that presents a potential contact hazard to firefighters.

Potential Health Effects

- Skin** : This product is not expected to be absorbed through the skin in sufficient quantities to increase overall toxicity. Prolonged or repeated skin contact tends to remove skin oils possible leading to irritation and dermatitis.
- Eyes** : May cause moderate transient irritation with reddening, swelling and blurred vision. Prolonged contact may cause serious irritation and possible corneal damage.
- Inhalation** : At room temperature, exposure to vapors are unlikely due to physical properties.
- Ingestion** : Irritation and burns to mouth, throat and esophagus will occur immediately upon contact. Severe ingestion exposures can result in convulsion, collapse and coma.
- Injection** : No Information Available.

ACUTE : No Information Available

CHRONIC : No Information Available

TARGET ORGANS : ACUTE: No Information Available

CHRONIC: No Information Available

CARCINOGENICITY : This product does not contain carcinogenic materials as defined by 29 CFR 1910.1200 (see Section 11 Toxicological Information for more details)

SECTION 04

FIRST AID MEASURES

Contaminated individuals must be taken for medical attention if any adverse reaction occurs. Rescuers should be taken for medical attention, if necessary. 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 victim has difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration. If professional advice is not available, do not induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsion, or unable to swallow.

Medical Conditions Aggravated by Exposure : No other information available..

Notes to Physicians : No information available.

SECTION 05

FIRE FIGHT MEASURES

Flash Point : 200E F

Flammable Limits : Information Not Available

Explosion Sensitivity to Mechanical Impact : Not Sensitive

Explosion Sensitivity to Static Discharge : Not Sensitive

Auto Ignition Temperature : Not Available

Extinguishing Media : Use extinguishing media suitable to surrounding fire. Preferably CO₂ Foam

: Water Fog	Yes	: Water Stream	Yes
: Water Spray	Yes	: Carbon Dioxide	Yes
: Halon	Yes	: Dry Chemical	Yes
: Foam	Yes	: Other	Any "ABC" Class

Special Fire Fighting Procedures : Incipient fire responders should wear eye protection. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment. Chemical resistant clothing may be necessary. Move containers from fire area if they have not been exposed to heat and if can be done without risk to personnel. If this product is involved in a fire, fire run-off water should be contained to prevent possible environmental damage. Rinse all contaminated equipment thoroughly with water before returning to service.

Fire and Explosion Hazards : This product is a moderate irritant and presents a potential contact hazard for firefighters. When involved in a fire, this material may decompose and produce acrid vapors, calcium compounds, and oxides of nitrogen. Through not anticipated to be a significant hazard associated with this product, due to the fact that this is a solution and the fact that the Calcium Nitrate Tetrahydrate is a small component of the material, it is important to note that in its dry form, Calcium Nitrate is an oxidizer, which can act to initiate and sustain the combustion of flammable materials.

SECTION 06

ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Take action to eliminate the source of the leak; contain spill by diking; vacuum up liquid or use absorbent media; remove to storage for disposal and rinse residual stain with water. 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.

SECTION 08

EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection : Respirators are not required under normal use.
Ventilation Requirements : Ventilation is generally not required.
Skin Protection : Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from liquid.
Work, Hygienic Practices : As required to protect skin and eyes from liquid, safety showers and/or eye wash should be available. Do not eat, drink, 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	: 1.27	Odor	: None to slightly sweet
pH Level approximate	: 10.0	Appearance	: Clear to light yellow liquid
Viscosity (cps)	: Not Available	Percent Volatile	: Not Available
Flash Point @ BF	: 200E F	Ignition Point @ BF	: Not Available
Freezing Point @ BF	: 20E F	Boiling Point @ BF	: 226E F
Explosion Hazard	: Not Available	Melting Point @ BF	: Not Available
Vapor Pressure (MM Hg)	: Not Available	Vapor Density	: 1.0
Evaporation Rate	: Not Available	Solubility in Water	: Complete

SECTION 10

STABILITY AND REACTION

Chemical Stability : Stable under normal temperatures.
Keep Away From : Reducing agents, cyanides, combustible material
Hazardous Polymerization : Will not occur under normal conditions.
Hazardous Decomposition Products : Oxides of Calcium and Nitrogen

SECTION 11

TOXICOLOGICAL INFORMATION

Ingredient (Chemical Name, CAS #, Common Name) (See Section 2 for Exposure Limits)
Toxicity Data

Calcium Nitrite CAS Number 13780-06-8
LD50 (Oral-Rat) >900 mg/Kg May cause nausea, slow respiration and coma. Repeated exposure may cause headache and blurred vision.
Suspected Cancer Agent : Product does not contain carcinogenic materials defined by 29 CFR 1910.1200
Irritancy of Product : No data available.
Sensitization of Product : No data available.
Reproductive Toxicity : No data available.
ACGIH Exposure Indices : No data available.

Calcium Nitrate Tetrahydrate CAS Number 13477-18.5
Standard Draize Test (Skin-Rabbit, adult) 500 mg/24 hour, Mild irritation effects LD50 (Oral-Rat) 3,900 mg/kg
Standard Draize Test (Eye-Rabbit, adult) 500 mg/24 hour, Mild LD50 (Oral-Rat) 302 mg/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 Nitrate is moderately irritating to contaminated tissue.
Sensitization of Product : Calcium Nitrate contains no known skin or respiratory sensitizers.
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 definitions in Section 16 Other)
ACGIH Exposure Indices : Currently, there are no ACGIH Biological Indices (BEIs) determined for the components of Calcium Nitrate.

Notation of Definitions : A *mutagen* is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An *embryotoxin* 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 *teratogen* is a chemical which causes damage to a developing "fetus", but the damage does not propagate across generational lines. A *reproductive toxin* is any substance which interferes in any way with the reproductive process.

SECTION 12

ECOLOGICAL INFORMATION

All work practices must be aimed at eliminating environmental contamination.

Environmental Stability : Information not available

Effects of Material on Plants or Animals : Information not available

Effects of Chemical on Aquatic Life : Information not available

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) : Information not available

RCRA Waste # : Information not available

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 : Not Available

TSCA Status : All components of this product are included in the EPA Toxic Substances Control Act Chemical Substance Inventory.

CERCLA Reportable Requirements : Not Available

SARA Title III Information : Title III Section 302 : No reportable chemicals
: Title III Section 311/312 : Health hazard: Acute, Chronic, Physical hazard - None
: Title III Section 323 : None above