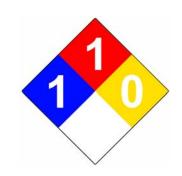


MATERIAL SAFETY DATA SHEET

CHEMSTRONG® A

Technology and Products That Offer Solutions

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® A

Chemical Name : Mixture - Not Applicable : Mixture - Not Applicable : Mixture - Not Applicable : Chemical Family : Chemical Dispersing Agent

Product Synonyms : None

Product Use : Normal setting, water reducing, concrete chemical admixture

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.

Ratio

The Emergency Number for office hours and non-office hours is (800) 424-9300 (CHEMTREC)

MSDS Number : GSM FM-100-08 Cancels MSDS Number : GSM FM-100-07

Section 02 Hazardous Ingredients

(See Section 11 for Complete Chemical Names)
Exposure Limits in Air
ACGIH-TLV
V STEL IDLH Other

Ingredient	by Weight	PEL	STEL	TLV	STEL	IDLH	Other
Sodium Glucoheptonate CAS Number 31138-65-5	20-35%	NA	NA	NA	NA	NA	NA
Triethanolamine CAS Number 000102-71-6	1-5%	3 ppm	NA	5 mg/m ³	NA	NA	NA

OSHA-PEL

SECTION 03

EMERGENCY HAZARDS IDENTIFICATION

Chemstrong® A is an amber/brown liquid with a very slight ammonia odor. Its main hazard potential is **Emergency Overview** vapor or liquid contact with the eyes, which could cause irritation. Swallowing large amounts could

cause injury.

Potential Health Effects

: Prolonged or repeated skin contact tends to remove skin oils possibly leading to irritation. Not expected to be Skin

absorbed trough the skin in sufficient quantities to increase overall toxicity. However, there is notation to make

the user aware of possible dermal absorption. Repeated exposure may cause a burn.

: May cause slight transient irritation. This is the primary route of entry as it relates to health hazards. **Eves**

Inhalation : At room temperature, exposures to vapors are unlikely due to physical properties.

Amounts ingested, incidental to industrial handling, are not expected to cause injury. Small amounts swallowed Ingestion

incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may

cause injury.

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 of minor components)

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 soap and running water. Remove exposed or contaminated clothing and 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 victim has difficulty with breathing, administer oxygen. 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. Do not induce vomiting unless directed by a physician. 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: 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.

Notes to Physicians: If burn is present, treat as any thermal burn, after decontamination. No specific antidote.

SECTION 05

FIRE FIGHT MEASURES

Flash Point : Not Determined, above 380EF

Flammable Limits : Not Determined **Explosion Sensitivity to Mechanical Impact** : Not Sensitive **Explosion Sensitivity to Static Discharge** : Not Sensitive **Auto Ignition Temperature** : Not Available

Extinguishing Media : Water Fog Yes: Water Stream NO - May cause fire to spread.

: Water Spray Yes: Carbon Dioxide Yes Yes: Dry Chemical : Halon Yes

Any "ABC" Class : Foam Yes: Other

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

Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion.

SECTION 06

ACCIDENTAL RELEASE MEASURES

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spilled liquid with sand or earth. 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 store in aluminum, copper and copper alloys.

EXPOSURE CONTROLS, PERSONAL PROTECTION SECTION 08

Respiratory Protection : Not Required.

: Ventilate as necessary to eliminate from the work area. **Ventilation Requirements**

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 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 : 1.185 Odor : Slight Ammonia

pH Level approximate : 10.0 **Appearance** : Dark Amber, Dark brown liquid

: Not Available **Percent Volatile** Viscosity (cps) : Not Available

Flash Point @ EF : Not Available **Ignition Point @ EF** : Not Available

Freezing Point @ EF : Not Determined **Boiling Point @ EF** : Not Determined, above 250EF

Explosion Hazard Melting Point @ EF : Not Applicable : Not Applicable : Not Applicable

Vapor Pressure (MM Hq) **Vapor Density** : Not Applicable **Solubility in Water Evaporation Rate** : Not Applicable : Compete

SECTION 10

STABILITY AND REACTION

Chemical Stability Stable under normal temperatures. Not sensitive to mechanical impact.

Avoid contact with oxidizing materials. Heating above 140EF in the presence of aluminum can result **Keep Away From**

> in corrosion and generation of flammable hydrogen gas. Product may potentially react with various halogenated organic solvents, resulting in temperature and/or pressure increases. Avoid contact with

metals such as copper and copper alloys.

Hazardous Polymerization : Will not occur under normal conditions.

Hazardous Decomposition Products: No hazardous decomposition products known.

Section 11

TOXICOLOGICAL INFORMATION

Ingredient (See Section 2 for Exposure Limits) (Chemical Name, CAS #, Common Name) **Toxicity Data** Vendor label is GR-50

Sodium Glucoheptonate CAS Number: 31138-65-5

Standard Draize Test (Skin-Rabbit, adult) Not Available LD50 (Oral-Rat) Not Available Standard Draize Test (Eye-Rabbit, adult) Not Available LD50 (Oral-Rat) Not Available

Suspected Cancer Agent : This product does not contain carcinogenic materials as defined by 29 CFR 1910.1200.

Irritancy of Product Not Available Sensitization of Product : Not Available Reproductive Toxicity Not Available ACGIH Exposure Indices: Not Available

Triethanolamine (TEA) CAS Number: 000102-71-6 80% Maximum Vendor label is A-8550

Highers from reaction of ethylene oxide and ammonia CAS Number 068953-70-8 20% Maximum Diethanolamine CAS Number 000111-42-2 01% Maximum

Standard Draize Test (Skin-Rabbit, adult) - LD50 is > 2,000 mg/kg LD50 (Oral-Rat) >2,000 mg/kg

Standard Draize Test (Eye-Rabbit, adult) - No known test results

Suspected Cancer Agent: Diethanolamine (a very small portion of this component) did not cause cancer in laboratory animals. Findings from a

chronic Diethanolmine skin painting study include liver and kidney tumors in but no tumors in rats. A number of

factors may have influenced the results and are being considered in their interpretation.

Irritancy of Product No data available

Sensitization of Product : Triethanolamine may in rare cases cause allergic skin response. Reproductive Toxicity Mutagency effects in vitro mutangenicity studies were negative in TEA

ACGIH Exposure Indices: No data available.

Other A 'skin" notation following the exposure guidelines refers to the potential for dermal absorption of the material. It is

intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize

dermal exposures should be considered.

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 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

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

Effects of Material on Plants or Animals

No Available Data

Effects of Chemical on Aquatic Life

No Available Data

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.

According to U.S. EPA (40 CFR 261) : Not Listed RCRA Waste # : Not Listed

SECTION 14

Transportation Information

Department of Transportation Shipping Name : Give name here (Regulated or not)

Hazard Class: Not ApplicableIdentification #: Not ApplicableLabel (s) Required: Not Applicable

Surface Freight Classification : Concrete or Masonry Concrete Chemical Additive

SECTION 15

REGULATORY INFORMATION

OSHA Status : Status Unknown

TSCA Status : All components of this product are included in the EPA Toxic Substances Act (TSCA)

Chemical Substance Inventory.

CERCLA Reportable Requirements : Status Unknown

SARA Title III Information : Section 302 No Reportable Chemicals

: Section 311/312 Health Hazard - None Physical Hazard - None

: Section 313 Diethanolamine CAS# 000111-42-2 Concentration <1%