

# MATERIAL SAFETY DATA SHEET

## POLYSTRONG® HP



Technology and Products That Offer Solutions

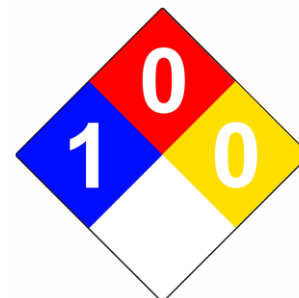
### "Information Concerning this Material Safety Data Sheet"

A Material Safety Data Sheet is for the benefit of the people who work with hazardous materials. Great Eastern Technologies, L.L.C., (GET) uses the standard 16 Section format developed by the Chemical Manufacturers Association (CMA) and published in 1993 as ANSI Z400, and endorsed by OSHA. A description of each Section's purpose is listed below the each Section title to assist the user with understanding this MSDS

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.



<b>Health Hazard – Left</b>	<b>Fire Hazard - Top</b>
0 Normal	0 Will Not Burn
1 Slightly Hazardous	1 Above 200E F
2 Hazardous	2 Below 200E F
3 Extreme Danger	3 Below 100E F
4 Deadly	4 Below 73E F
<b>Instability- Right</b>	<b>Other - Bottom</b>
0 Stable	OXY Oxidizer
1 Unstable if Heated	ACID Acid
2 Violent Chemical Change	ALK Alkali
3 Shock/Heat May Detonate	COR Corrosive
4 May Detonate	

## SECTION 01

## CHEMICAL PRODUCT AND COMPANY

This section is intended to give the names of the material as it relates to the material's label and shipping document. It will include the mailing address and relevant phone numbers of the material manufacture.

### Product Identification

**Product Trade Name** : Polystrong® HP  
**Chemical Name** : Mixture - Not Applicable  
**CAS #** : Mixture - Not Applicable  
Composition : Methacrylic Acid Copolymer CAS# Confidential 30-35%  
Composition : Water CAS# 7732-18-5 65-70%  
Composition : Methacrylic Acid CAS# 79-41-4 I <0.3%  
**Chemical Family** : Chemical Dispersing Agent  
**Product Synonyms** : None Available  
**Product Use** : Dispersant, water-reducing admixture for concrete, superplasticizer  
**DOT Hazard Class** : Not Available

### 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-510-12 **Cancels MSDS Number** : GSM FM-510-12  
**Publication Date** : January, 2012

## SECTION 02

## HAZARDOUS INGREDIENTS

This section contains information to identify hazardous components of the material. If non-hazardous ingredients are listed, they will be listed separately. Chemical Abstract Service (CAS) numbers will be given if available, as well as OSHA Permissible Exposure Limits and American Conference of Government Industrial Hygienist (ACGIH) TLVs. If the identity of any ingredient is claimed to be a trade secret, it will be so indicated in this section.

(See Section 11 for Complete Chemical Names)

Ingredient	Maximum by Weight	Exposure Limits in Air				
		OSHA-PEL		ACGIH-TLV		Other
		PEL	STEL	TLV	STEL	

If this table is blank, then this product does not contain any regulated substances. This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

## SECTION 03

## EMERGENCY HAZARDS IDENTIFICATION

This section describes potential health effects hazards of the material that may be of concern for emergency response personnel.

**Emergency Overview** : Polystrong™ HP is a clear to hazy brown liquid with a slight odor. There are no known hazards in normal industrial use. Use good hygienic practices. Avoid contact with skin and eyes. Do not ingest. Do not breathe gas, fumes, vapor or spray. After handling, always wash hands thoroughly with soap and water.

### Potential Health Effects

- Skin** : May cause slight skin irritation.
- Eyes** : This product may cause irritation to eyes.
- Inhalation** : No known significant effects or critical hazards
- Ingestion** : May be harmful if swallowed.
- Injection** : No Information Available

**ACUTE** : Repeated or prolonged exposure is not known to aggravate medical condition

**CHRONIC** : No known significant effects or critical hazards

**SIGNS OF OVEREXPOSURE** : Skin and eye irritation

**TARGET ORGANS** : ACUTE: No known effects      CHRONIC: No known effects

**CARCINOGENICITY** : No known significant effects or critical hazards

## SECTION 04

## FIRST AID MEASURES

This section includes emergency and first aid procedures and is written in layman's language in order to be easily understood. Procedures for each potential route of exposure will be included.

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. 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, wash out mouth with water, remove dentures if any, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. Do not induce vomiting unless directed by medical personnel. Do not give diluents (milk or water) to someone who is unconscious, having convulsion, or unable to swallow.

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

**Notes to Physicians** : Provide general support measures and treat symptomatically.

## SECTION 05

## FIRE FIGHT MEASURES

*This section gives information to describe fire and exposure properties of the material, extinguishing media to be used, and fire-fighting instructions. It applies to anyone who may be in the area of the fire.*

<b>Flash Point</b>	: Not Available
<b>Flammable Limits</b>	: Not Applicable
<b>Products of Combustion</b>	: Carbon Oxides (CO, CO2)
<b>Explosion Sensitivity to Mechanical Impact</b>	: Not Sensitive
<b>Explosion Sensitivity to Static Discharge</b>	: Not Sensitive
<b>Auto Ignition Temperature</b>	: Not Available
<b>Extinguishing Media</b>	: Use extinguishing media suitable for surrounding materials
	: Water Spray Yes : Carbon Dioxide Yes : Foam YES
	: Halon Yes : Dry Chemical 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 :** May produce toxic fumes of carbon oxides if burning. Containers can build up pressure if exposed to heat (fire). Containers should be cooled with water to prevent vapor pressure build up.

## SECTION 06

## ACCIDENTAL RELEASE MEASURES

*Spill and Leak Response. This section will give information needed to prevent or minimize adverse effects on employees, neighbors, property, and the environment, including waterways. It is intended for emergency response personnel.*

Isolate hazard area and deny entry to unnecessary or unprotected personnel. Contain spilled liquid with sand or earth. Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Place in a disposal container. Avoid runoff into storm sewers and ditches which lead to waterways.

## SECTION 07

## HANDLING AND STORAGE

*This section provides guidelines for minimizing any potential hazards from storing the material. It should include information to minimize handling when appropriate, and conditions such as temperature, inert atmosphere, and conditions to avoid.*

Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Use normal personal hygiene and housekeeping. Store in cool, dark and dry areas. Keep from other incompatible materials. Keep container tightly closed. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not ingest. Avoid contact with skin and eyes. Do not breathe gas, fumes, vapor or spray. Wash thoroughly after handling.

## SECTION 08

## EXPOSURE CONTROLS, PERSONAL PROTECTION

*This section will discuss the degree of engineering control that may be needed when handling the material, and the personal protective equipment that should be used if there is a potential for exposure above the regulatory or suggested limits. Exposure guidelines, such as OSHA PELs and ACGIH TLVs should be included in this section.*

<b>Respiratory Protection</b>	: Respirators are not required under normal commercial use.
<b>Ventilation Requirements</b>	: Ventilate as necessary to eliminate from the work area.
<b>Eye Protection</b>	: Wear chemical goggles or a full face shield
<b>Skin Protection</b>	: Use rubber or neoprene gloves, chemical goggles and clothing sufficient to protect skin from liquid.
<b>Work, Hygienic Practices</b>	: As required to protect skin and eyes from liquid, safety showers and/or eye wash should be available. Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.
<b>Exposure Limits</b>	: None Established. Signs of overexposure are irritation to skin and eyes.

## SECTION 09

## PHYSICAL AND CHEMICAL PROPERTIES

*These properties are intended to assist users to determine proper handling and storage. Additional properties other than the standard data given below may be included if they are useful.*

<b>Specific Gravity</b>	: 1.060	<b>Odor</b>	: Mild Odor
<b>pH Level approximate</b>	: 3.5 to 5.0	<b>Appearance</b>	: Clear to hazy light brown liquid
<b>Viscosity (cps)</b>	: Not Available	<b>Percent Volatile</b>	: NA
<b>Flash Point @ EF</b>	: Greater Than 200EF	<b>Ignition Point @ EF</b>	: No Information
<b>Freezing Point @ EF</b>	: -12° C (10.4° F)	<b>Boiling Point @ EF</b>	: 100° C (212° F)
<b>Explosion Hazard</b>	: No Information	<b>Melting Point @ EF</b>	: Not Applicable
<b>Vapor Pressure (MM Hg)</b>	: No Information	<b>Vapor Density</b>	: No Information
<b>Evaporation Rate</b>	: No Information	<b>Solubility in Water</b>	: Compete

## SECTION 10

## STABILITY AND REACTION

*This section describes conditions that may result in a potentially hazardous reaction, such as evolution of hazardous gases, production of heat, or other hazardous conditions.*

<b>Chemical Stability</b>	: Stable under normal temperatures.
<b>Keep Away From</b>	: Strong oxidizing agents and strongly acidic or alkaline solutions. Avoid excessive heat.
<b>Incompatible Materials</b>	: Strong oxidizing agents.
<b>Hazardous Polymerization</b>	: Will not occur under normal conditions.
<b>Hazardous Decomposition Products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11

## TOXICOLOGICAL INFORMATION

*This section includes known information resulting from animal testing or human experience on the toxicity of the material. Also included would be information on its potential for causing cancer. Data will include acute, sub-chronic, and chronic exposures, if available.*

Ingredient (See Section 2 for Exposure Limits)

(Chemical Name, CAS #, Common Name) Toxicity Data

Polystrong HP <sup>®</sup>	
Standard Draize Test (Skin-Rabbit, adult)	No information Available
Standard Draize Test (Eye-Rabbit, adult)	No Information Available
Suspected Cancer Agent :	No known significant effects or critical hazards
Irritancy of Product :	Polystrong HP <sup>®</sup> may moderately irritate to contaminated tissue with prolonged use.
Sensitization of Product :	Polystrong HP <sup>®</sup> may contain skin or respiratory sensitizers.
Reproductive Toxicity :	This is no information available concerning this product's reported cause as a 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 :	No information available.

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

*This section will list known impacts to the environment that may occur if the material is released to the environment, or in evaluating waste treatment practices.*

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 Information Available

**Effects of Chemical on Aquatic Life** : No Information Available

## SECTION 13

## DISPOSAL CONSIDERATIONS

*This section provides guidance to environmental and other technical, or in evaluating waste treatment practices.*

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) waste of this product : No Information Available

RCRA Waste Number : No Information Available

## SECTION 14

## TRANSPORTATION INFORMATION

*This section provides information concerning classification for shipping the material. It should include U.S. Department of Transportation (DOT) classifications, or an indication that it is not regulated.*

**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 Admixture

## SECTION 15

## REGULATORY INFORMATION

*This section contains information regarding the regulatory status of the material. It should include OSHA, and EPA regulations if available.*

**OSHA Status** : None

**TSCA Status** : All components are on the US EPA, TSCA Inventory List.

**CERCLA Reportable Requirements** : None

**SARA Title III Information** : None

**California Proposition 65** : None detected.

## SECTION 16

## OTHER INFORMATION

This section is intended for other material the preparer feels is pertinent, and that should be not be included in the other fifteen sections.

### Definitions and Terms

A large number of abbreviations and acronyms appear on a MSDS. Some of these commonly used included the following:

**CAS #:** This is the Chemical Abstract Service Number which uniquely identifies each constituent.

#### Exposure Limits in Air

**ACGIH** American Conference of Government Industrial Hygienist, a professional association which establishes exposure limits.

**TLV** Threshold Limit Value, an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8 hour Time Weighted Average (TWA), the 15 minute Short Term Exposure Limit, and the instantaneous Ceiling Level (C). Skin absorption limits must also be considered.

**OSHA** U.S. Occupational Safety and Health Administration.

**PEL** Permissible Exposure Limit, This exposure limit means exactly the same as a TLV, except it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminates Rule (Federal Register: 58: 35338-35351 and 58:40191). Both the current PELs and the vacated PELs are indicated. The phrase, "vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order.

**IDLH** Immediate Dangerous to Life and Health, This level represents a concentration from which one can escape within 30 minutes without suffering escape-preventing or permanent injury.

**NIOSH** National Institute of Occupational Safety and Health, which is the research arm of OSHA.

**REL** Recommended Exposure Limits, Issued by NIOSH.

#### Hazard Ratings

##### **HMIS Hazardous Materials Identification System**

##### **Health Hazard**

- 0 Minimal acute or chronic exposure hazard
- 1 Slight acute or significant chronic exposure hazard.
- 2 Moderate acute or significant chronic exposure hazard.
- 3 Severe acute or significant chronic exposure hazard. One time exposure can result in permanent injury and may be fatal.
- 4 Extreme acute or significant chronic exposure hazard. One time exposure can be fatal.

##### **Flammability Hazard**

- 0 Minimal Hazards.
- 1 Materials that require substantial pre-heating before burning.
- 2 Combustible liquids or solids; liquids with a flash point of 38-39C (100-200F)
- 3 Class IB & IC flammable liquids with flash points below 38C (100F)
- 4 Class IA flammable liquids with a flash point below 23C (73F) and boiling points below 38C (100F).

##### **Reactive Hazard**

- 0 Normally Stable
- 1 Material that can become unstable at elevated temperatures or which can react slightly with water.
- 2 Materials that are unstable but do not detonate or which can react violently with water.
- 3 Materials which can detonate when initiated or which can react explosively with water.
- 4 Materials which can detonate at normal temperatures or pressures.

##### **NFPA National Fire Protection Association**

##### **Health Hazard**

- 0 Materials that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
- 1 Materials that on exposure under fire conditions could cause skin irritation or minor residual injury.
- 2 Materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury.
- 3 Materials that on short exposure could cause serious temporary or residual injury.
- 4 Materials that on very short exposure causes death or major injury.  
*Flammability Hazard and Reactivity Hazard are the same as HMIS*

##### **Flammability Limits in Air**

Much of the information related to fire and explosion is derived from the NFPA as follows:

**Autoignition Temp.** The minimum temperature required to initiate combustion in air with no other source of ignition.

**Flash Point** Minimum Temperature at which a liquid gives off vapors to form an ignitable mixture with air.

**LEL** The lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

**UEL** The highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

#### Toxicological Information

Possible health hazards as derived from human data, animal studies, or from the results of studies when similar compounds are presented. Definitions of some terms used in this section are:

**LD50** Lethal Dose which kills 50% of the exposed animals.

**LC50** Lethal Concentration which kills 50% of the exposed animals.

**ppm** Concentration expressed in parts of material per million parts of air or water.

**mg/m<sup>3</sup>** Concentration express in weight of substance per volume of air.

**mg/kg** Quantity of material, by weight, administered to a test subject based on their body weight per kg.

**IARC** International Agency for Research of Cancer

**NTP** National Toxicology Program (Cancer Research)

**RTECS** Registry of Toxic Effects of Chemical Substances (Cancer Research)

**Notation** The IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with ranking from 1 to 4. Sub-Rankings (2A, 2B, etc.) Are also used. Other measures of toxicity include TDLo the lowest dose to cause a symptom and TClO the lowest concentration to cause a symptom.

**BEI** Biological Exposure Indices represents the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV.

**EC** Ecological Information, EC is the effect concentration in water.

#### Regulatory Information

This section explains various laws and regulations on the material.

**EPA** U.S. Environmental Protection Agency.

**DOT** U.S. Department of Transportation.

**SARA** U.S. Superfund Amendments and Reauthorization Act.

**TSCA** U.S. Toxic Substance Control Agency.

**CERCLA** Comprehensive Environmental Response, Compensation and Liability Act