



# Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 11/06/2017

Reviewed on 11/06/2017

## 1 Identification

- **Product Identifier**
- **Trade name: Elephant Armor Ultra-High Performance Mortar**
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** Mortar
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**  
GST International, Inc. www.gst-intl.com  
994 Packer Way  
Sparks, NV 89431  
775-829-2626
- **Emergency telephone number:**  
INFOTRAC: 1-800-535-5053      Contract #: 93918  
Outside the US and Canada: 352-323-3500

Note: INFOTRAC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

## 2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS08 Health hazard

Carc. 1A      H350 May cause cancer.



GHS05 Corrosion

Eye Dam. 1      H318 Causes serious eye damage.



GHS07

Skin Irrit. 2      H315 Causes skin irritation.  
Skin Sens. 1      H317 May cause an allergic skin reaction.  
STOT SE 3      H335 May cause respiratory irritation.

- **Label elements:**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS05



GHS07



GHS08

- **Signal word:** Danger
- **Hazard-determining components of labeling:**  
Silica

(Contd. on page 2)

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**Trade name: Elephant Armor Ultra-High Performance Mortar**

Cement, portland, chemicals  
 Aluminosilicate Glass  
 Quartz (SiO<sub>2</sub>)

**• Hazard statements:**

H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H317 May cause an allergic skin reaction.  
 H350 May cause cancer.  
 H335 May cause respiratory irritation.

**• Precautionary statements:**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P264 Wash thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P272 Contaminated work clothing must not be allowed out of the workplace.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 If on skin: Wash with plenty of water.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P310 Immediately call a poison center/doctor.  
 P312 Call a poison center/doctor if you feel unwell.  
 P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).  
 P332+P313 If skin irritation occurs: Get medical advice/attention.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P362+P364 Take off contaminated clothing and wash it before reuse.  
 P363 Wash contaminated clothing before reuse.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**• Unknown acute toxicity:**

96.4 % of the mixture consists of component(s) of unknown toxicity.

**• Classification system:****• NFPA ratings (scale 0 - 4)****• HMIS-ratings (scale 0 - 4)****• Hazard(s) not otherwise classified (HNOC):** None known**• Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 3)



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### 3 Composition/Information on Ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with non-hazardous additions.

- **Dangerous Components:**

CAS: 1317-95-9	Silica ☠ Carc. 1A, H350; ⚠ STOT SE 3, H335	25-50%
	Aluminosilicate Glass ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	15-35%
CAS: 960375-09-1	Calcium Sulfoaluminate Cement ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; Eye Irrit. 2B, H320	25-50%
CAS: 65997-15-1 RTECS: VV 8770000	Cement, portland, chemicals ☠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335	5-15%
CAS: 14808-60-7 RTECS: VV 7330000	Quartz (SiO <sub>2</sub> ) ☠ Carc. 1A, H350; STOT RE 1, H372; ⚠ Acute Tox. 4, H332; STOT SE 3, H335; Eye Irrit. 2B, H320	≤ 2.5%

### 4 First-Aid Measures

- **Description of first aid measures:**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If swallowed and symptoms occur, consult a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

### 5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** No further relevant information available.
- **Advice for firefighters:**
- **Protective equipment:** No special measures required.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **Reference to other sections:**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

(Contd. on page 4)



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## 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** Store in the original container.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

## 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

<b>1317-95-9 Silica</b>	
PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV	TLV withdrawn
<b>65997-15-1 Cement, portland, chemicals</b>	
PEL	Long-term value: 50 mppcf or 15* 5** mg/m <sup>3</sup> *total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m <sup>3</sup> *total dust **respirable fraction
TLV	Long-term value: 1* mg/m <sup>3</sup> E; *as respirable fraction
<b>14808-60-7 Quartz (SiO<sub>2</sub>)</b>	
PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m <sup>3</sup> *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m <sup>3</sup> *as respirable fraction

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing and wash before reuse.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.

(Contd. on page 5)

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**Trade name: Elephant Armor Ultra-High Performance Mortar****· Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

**· Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

**· Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

**· Eye protection:**

Tightly sealed goggles

**9 Physical and Chemical Properties****· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:**

Granulate

**Color:**

Black

**· Odor:**

Mild

**· Odor threshold:**

Not determined.

**· pH-value:**

Not applicable.

**· Change in condition****Melting point/Melting range:**

&gt;999 °C (&gt;1,830.2 °F)

**Boiling point/Boiling range:**

999 °C (1,830.2 °F)

**· Flash point:**

None

**· Flammability (solid, gaseous):**

Not determined.

**· Decomposition temperature:**

Not determined.

**· Auto igniting:**

Product is not self-igniting.

**· Danger of explosion:**

Product does not present an explosion hazard.

**· Explosion limits:****Lower:**

Not determined.

**Upper:**

Not determined.

**· Vapor pressure:**

Not applicable.

**· Density:**

Not determined.

(Contd. on page 6)

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- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with:**
  - Water:** Insoluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not applicable.
  - Kinematic:** Not applicable.
- **Solvent content:**
  - Organic solvents:** 0.0 %
  - Water:** 0.2 %
- **Solids content:** 100.0 %
- **Other information:** No further relevant information available.

**10 Stability and Reactivity**

- **Reactivity:** No further relevant information available.
- **Chemical stability:**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

**11 Toxicological Information**

- **Information on toxicological effects:**
- **Acute toxicity:**
- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant
- **Carcinogenic categories:**

· **IARC (International Agency for Research on Cancer):**

1317-95-9	Silica	1
9002-89-5	Poly(vinyl alcohol)	3
14808-60-7	Quartz (SiO <sub>2</sub> )	1

· **NTP (National Toxicology Program):**

1317-95-9	Silica	K
14808-60-7	Quartz (SiO <sub>2</sub> )	K

· **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

(Contd. on page 7)



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## 12 Ecological Information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

## 13 Disposal Considerations

- **Waste treatment methods:**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport Information

- **UN-Number:**
- **DOT, ADR/ADN, ADN, IATA** Non-Regulated Material
- **IMDG** Non-Regulated Material
- **UN proper shipping name:** Not Regulated for Transportation
- **DOT, ADR/ADN, ADN, IMDG, IATA** Non-Regulated Material
- **Transport hazard class(es):**
- **Class:** Non-Regulated Material
- **Packing group:**
- **DOT, ADR/ADN, IMDG, IATA** Non-Regulated Material
- **Environmental hazards:** Not applicable.
- **Special precautions for user:** Not applicable.
- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable.
- **UN "Model Regulation":** Non-Regulated Material

## 15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**

• <b>Section 355 (extremely hazardous substances):</b>
None of the ingredients are listed.

• <b>Section 313 (Specific toxic chemical listings):</b>
None of the ingredients are listed.

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• <b>TSCA (Toxic Substances Control Act):</b>		
65997-15-1	Cement, portland, chemicals	
7439-89-6	Iron	
9002-89-5	Poly(vinyl alcohol)	
14808-60-7	Quartz (SiO <sub>2</sub> )	
36290-04-7	Sodium salt of poly-naphthalene sulfonic acid	
64741-89-5	Distillates (petroleum), solvent-refined light paraffinic	
64741-88-4	Distillates (petroleum), solvent-refined heavy paraffinic	
7757-82-6	Sodium Sulphate	
7732-18-5	Water, distilled water, deionized water	
• <b>California Proposition 65:</b>		
• <b>Chemicals known to cause cancer:</b>		
14808-60-7	Quartz (SiO <sub>2</sub> )	
• <b>Chemicals known to cause reproductive toxicity for females:</b>		
None of the ingredients are listed.		
• <b>Chemicals known to cause reproductive toxicity for males:</b>		
None of the ingredients are listed.		
• <b>Chemicals known to cause developmental toxicity:</b>		
None of the ingredients are listed.		
• <b>Carcinogenic categories:</b>		
• <b>EPA (Environmental Protection Agency):</b>		
None of the ingredients are listed.		
• <b>TLV (Threshold Limit Value established by ACGIH):</b>		
1317-95-9	Silica	A2
14808-60-7	Quartz (SiO <sub>2</sub> )	A2
• <b>NIOSH-Ca (National Institute for Occupational Safety and Health):</b>		
1317-95-9	Silica	
14808-60-7	Quartz (SiO <sub>2</sub> )	

• **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

• **Hazard pictograms:**

GHS05 GHS07 GHS08

• **Signal word:** Danger• **Hazard-determining components of labeling:**

Silica  
 Cement, portland, chemicals  
 Aluminosilicate Glass  
 Quartz (SiO<sub>2</sub>)

(Contd. on page 9)





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### Trade name: Elephant Armor Ultra-High Performance Mortar

**Hazard statements:**

- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.
- H350 May cause cancer.
- H335 May cause respiratory irritation.

**Precautionary statements:**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 If on skin: Wash with plenty of water.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P310 Immediately call a poison center/doctor.
- P312 Call a poison center/doctor if you feel unwell.
- P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P363 Wash contaminated clothing before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**National regulations:**

None of the ingredients are listed.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

**Date of preparation / last revision:** 11/06/2017 / 10**Abbreviations and acronyms:**

- ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

(Contd. on page 10)



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NIOSH: National Institute for Occupational Safety and Health  
OSHA: Occupational Safety & Health Administration  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit  
REL: Recommended Exposure Limit  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B  
Skin Sens. 1: Skin sensitisation – Category 1  
Carc. 1A: Carcinogenicity – Category 1A  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1