SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Name: GST International Elephant Armor Primer

Company Name: GST International, Inc.

Company Address: 994 Packer Way
Company Address Cont: Sparks, NV 89434
Business Phone: 775/829-2626
Website: www.gstinternational.com

Recommended Use: Primer for Mortar

SECTION 2 – HAZARDS IDENTIFICATION

Hazard Classification: This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Other hazards: None.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic polymer(s)</td>
<td>Not hazardous</td>
<td>46.0-48.0%</td>
</tr>
<tr>
<td>Residual monomers</td>
<td>Not available</td>
<td>&lt; 0.05%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>52.0 -54.0%</td>
</tr>
</tbody>
</table>

SECTION 4 – FIRST AID MEASURES

Description of first aid measures
Inhalation: Move to fresh air.

Skin contact: Wash with water and soap as a precaution. If skin irritation persists, call a physician.
Eye contact: Rinse with plenty of water. If eye irritation persists, consult a specialist.
Ingestion: Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
SECTION 5 – FIRE FIGHTING MEASURES

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.  
Unsuitable extinguishing media: no data available  
Special hazards arising from the substance or mixture Hazardous combustion products: no data available  
Unusual Fire and Explosion Hazards: Material can splatter above 100C/212F. Dried product can burn.  
Advice for firefighters  
Fire Fighting Procedures: no data available  
Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit.

SECTION 6 – ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep people away from and upwind of spill/leak. Material can create slippery conditions.  
Environmental precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.  
Methods and materials for containment and cleaning up: Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas.  
Conditions for safe storage: Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.  
Storage stability  
Storage temperature: 1 - 49 °C (34 - 120 °F)  
Other data: Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters  
Exposure limits are listed below, if they exist.  

Exposure controls  
Engineering controls: Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A
Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility.

Individual protection measures
- **Eye/face protection**: Safety glasses with side-shields. Eye protection worn must be compatible with respiratory protection system employed.
- **Skin protection**: The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Neoprene gloves
- **Respiratory protection**: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator’s use. None required under normal operating conditions. Where vapors and/or mists may occur, wear a properly fitted NIOSH approved (or equivalent) half-mask, airpurifying respirator. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor cartridges and N95 filters. If oil mist is present, use R95 or P95 filters.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**
  - Physical state: liquid
  - Color: Milky white
  - Odor: acrylic-like
  - Odor Threshold: no data available
  - pH: 9.3 - 10.2
- **Melting point/range**: 0 °C (32 °F) Water
- **Freezing point**: no data available
- **Boiling point**: (760 mmHg) 100 °C (212 °F) Water
- **Flash point**: Noncombustible
- **Evaporation Rate (Butyl Acetate = 1)**: <1 Water
- **Flammability (solid, gas)**: Not Applicable
  - Lower explosion limit: Not applicable
  - Upper explosion limit: Not applicable
- **Vapor Pressure**: 17 mmHg at 20 °C (68 °F) Water
- **Relative Vapor Density (air = 1)**: <1 Water
- **Relative Density (water = 1)**: 1.0 - 1.2
- **Water solubility**: Dilutable
- **Partition coefficient n-octanol/water**: no data available
- **Auto-ignition temperature**: Not applicable
- **Decomposition temperature**: no data available
- **Dynamic Viscosity**: 10 - 60 mPa.s
- **Kinematic Viscosity**: no data available
- **Explosive properties**: no data available
- **Oxidizing properties**: no data available
Molecular weight: no data available
Percent volatility: 52 - 54 % Water

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: no data available

Chemical stability: Stable

Possibility of hazardous reactions: None known.
Product will not undergo polymerization.

Conditions to avoid: no data available

Incompatible materials: There are no known materials which are incompatible with this product. Hazardous decomposition products: Thermal decomposition may yield acrylic monomers.

SECTION 11 – TOXICOLOGY INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Acute toxicity
  Acute oral toxicity
    LD50, Rat, > 5,000 mg/kg
  Acute dermal toxicity
    LD50, Rabbit, > 5,000 mg/kg
  Acute inhalation toxicity
    Product test data not available.

Skin corrosion/irritation
  May cause transient irritation.

Serious eye damage/eye irritation
  No eye irritation

Sensitization
  Product test data not available.

Specific Target Organ Systemic Toxicity (Single Exposure)
  Product test data not available.

Specific Target Organ Systemic Toxicity (Repeated Exposure)
  Product test data not available.

Carcinogenicity
  Product test data not available.

Teratogenicity
  Product test data not available.

Reproductive toxicity
Product test data not available.

**Mutagenicity**
Product test data not available.

**Aspiration Hazard**
Product test data not available.

**Additional information**
No data are available for this material. The information shown is based on profiles of compositionally similar materials.

**COMPONENTS INFLUENCING TOXICOLOGY:**

- **Acrylic polymer(s)**
  - Acute inhalation toxicity
    - The LC50 has not been determined.

- **Residual monomers**
  - Acute inhalation toxicity
    - The LC50 has not been determined.

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**SECTION 12 – ECOLOGICAL INFORMATION**

Ecotoxicological information on this product or its components appear in this section when such data is available.

**General Information**
There is no data available for this product.

**Toxicity**

- **Acrylic polymer(s)**
  - Acute toxicity to fish
    - No relevant data found.

- **Residual monomers**
  - Acute toxicity to fish
    - No relevant data found.

**Persistence and degradability**

- **Acrylic polymer(s)**
  - Biodegradability: No relevant data found.

- **Residual monomers**
  - Biodegradability: No relevant data found.

**Bioaccumulative potential**

- **Acrylic polymer(s)**
  - Bioaccumulation: No relevant data found.

- **Residual monomers**
  - Bioaccumulation: No relevant data found.

**Mobility in soil**

- **Residual monomers**
  - No relevant data found.
SECTION 13 – DISPOSAL CONSIDERATIONS

**Disposal methods:** Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

**DOT**
Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**
Not regulated for transport

**Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code:**
Consult IMO regulations before transporting ocean bulk

**Classification for AIR transport (IATA/ICAO):**
Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15 – REGULATORY INFORMATION

**OSHA Hazard Communication Standard**
This product is considered non-hazardous under the OSHA Hazard Communication Standard (29CFR1910.1200).

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**
This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**
This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

**Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103**
Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to
state and local emergency planning committees under the Superfund Amendments and
Reauthorization Act (SARA) Title III Section 304.

**Pennsylvania**
Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2,
Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the
Pennsylvania Worker and Community Right-to-Know Act.

**United States TSCA Inventory (TSCA)**
All components of this product are in compliance with the inventory listing requirements of the U.S.
Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**SECTION 16 – OTHER INFORMATION**

**Hazard Rating System**
**HMIS**
Health - 1
Flammability - 0
Physical Hazard – 0

**Information Source and References**
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from
information supplied by internal references within our company.

The information contained herein is believed to be accurate but is not warranted to be so. Data and
calculations are based on information furnished by the manufacturer of the product and manufacturers of
the components of the product. Users are advised to confirm in advance of the need that information is
current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible
situations which the user may experience during processing. Each aspect of your operation should be
examined to determine if, or where, additional precautions may be necessary. All health and safety
information contained in this bulletin should be provided to your employees or customers. GST International
assumes no responsibility for injury to vendee or third party person proximately caused by the material if
reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, GST International
assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety
procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations
remains the responsibility of the user.

**END OF SDS SHEET**