



# Safety Data Sheet

Issue Date: 08-May-2020

Revision Date: 12-May-2020

Version 1

## 1. IDENTIFICATION

**Product identifier**

**Product Code & Name** GST 535 Elephant Armor Delay

**Other means of identification**

**SDS #** GST-003

**Recommended use of the chemical and restrictions on use**

**Recommended Use** Mortar Mix Retarder.

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

GST International, Inc.  
250 Cal Ln. Suite B  
Sparks, NV 89431  
Ph: 775-829-2626  
www.gstinternational.com

**Emergency telephone number**

**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America) Contract #93918

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear to white crystals

**Physical state** Solid

**Odor** Odorless, Slight sugar odor

**Classification**

Serious eye damage/eye irritation

Category 2A

**Signal Word**

Warning

**Hazard statements**

Causes serious eye irritation



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 If eye irritation persists: Get medical advice/attention

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No	Weight-%
Citric Acid	77-92-9	100

**4. FIRST AID MEASURES**

**Description of first aid measures**

- General Advice** Provide this SDS to medical personnel for treatment.
- Eye Contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Skin Contact** Wash with plenty of soap and water. Wash contaminated clothing before reuse. If symptoms persist, call a physician.
- Inhalation** Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center if individual's condition declines or if symptoms persist.
- Ingestion** Rinse mouth. Do not induce vomiting without medical advice. If conscious give 2 glasses of water to dilute. Never give anything by mouth to an unconscious person. Get medical attention.

**Most important symptoms and effects, both acute and delayed**

- Symptoms** Causes serious eye irritation. May be harmful if swallowed.

**Indication of any immediate medical attention and special treatment needed**

- Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Water, carbon dioxide, dry chemical. Foam. Halon.

- Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Product is not flammable or combustible.

- Hazardous combustion products** Carbon monoxide.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**                      Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate area of leak or spill.

**Environmental precautions**

**Environmental precautions**            Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment**                Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up**                    Avoid the generation of dusts during clean-up. Use vacuum (equipped with a HEPA filter) or wet cleanup methods to remove dusts. Dispose of contents/container to an approved waste disposal plant. For waste disposal, see section 13 of the SDS.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling**                Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing. Empty containers will retain product residue; do not re-use. Wash face, hands and any exposed skin thoroughly after handling. Avoid contact with skin, eyes or clothing. Avoid generation of dust.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**                      Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials. Protect from direct sunlight. Protect from direct heat.

**Incompatible Materials**                 Bases. Strong oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid 77-92-9	-	15 mg / m3 (Total)	-

**Appropriate engineering controls**

**Engineering Controls**                      Emergency eye wash stations and showers should be available within the work area.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**                    Wear safety glasses with side shields (or goggles). Refer to 29 CFR 1910.133 for eye and face protection regulations.

**Skin and Body Protection**              Wear protective gloves and protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

**Respiratory Protection** If necessary, wear a MSHA/NIOSH-approved respirator. Refer to 29 CFR 1910.134 for respiratory protection requirements.

**General Hygiene Considerations** Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Solid	<b>Odor</b>	Odorless, Slight sugar odor
<b>Appearance</b>	Clear to white crystals	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Clear to white		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
<b>pH</b>	2.0 for 1% solution		
<b>Melting point / freezing point</b>	Not determined		
<b>Boiling point / boiling range</b>	Not determined		
<b>Flash point</b>	Not determined		
<b>Evaporation Rate</b>	Not determined		
<b>Flammability (Solid, Gas)</b>	Not determined		
<b>Flammability Limit in Air</b>			
<b>Upper flammability or explosive limits</b>	Not determined		
<b>Lower flammability or explosive limits</b>	Not determined		
<b>Vapor Pressure</b>	Not determined		
<b>Vapor Density</b>	Not determined		
<b>Relative Density</b>	Not determined		
<b>Water Solubility</b>	Soluble in water		
<b>Solubility in other solvents</b>	Not determined		
<b>Partition Coefficient</b>	Not determined		
<b>Autoignition temperature</b>	Not determined		
<b>Decomposition temperature</b>	Not determined		
<b>Kinematic viscosity</b>	Not determined		
<b>Dynamic Viscosity</b>	Not determined		
<b>Explosive Properties</b>	Not determined		
<b>Oxidizing Properties</b>	Not determined		

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to Avoid

Incompatible Materials. Heat.

### Incompatible materials

Bases. Strong oxidizing agents.

**Hazardous decomposition products**

Carbon oxides.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

<b>Eye Contact</b>	Causes serious eye irritation.
<b>Skin Contact</b>	Prolonged contact may cause redness and irritation.
<b>Inhalation</b>	May cause irritation if inhaled.
<b>Ingestion</b>	May be harmful if swallowed.

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Citric Acid 77-92-9	= 3000 mg/kg ( Rat ) = 3 g/kg ( Rat )	> 2000 mg/kg ( Rat )	-

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document .

<b>Oral LD50</b>	3,000.00 mg/kg
<b>Dermal LD50</b>	2,002.00 mg/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Component Information**

Chemical name	Algae/aquatic plants	Fish	Crustacea
Citric Acid 77-92-9		1516: 96 h Lepomis macrochirus mg/L LC50	120: 72 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

Chemical name	Partition coefficient
Citric Acid 77-92-9	-1.72

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

- Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

- Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
- DOT** Not regulated
- IATA** Not regulated
- IMDG** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Citric Acid	X	ACTIVE	X	X	X	X	X	X	X

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b> 1	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Special Hazards</b> Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b> 1	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal Protection</b> X

Issue Date: 08-May-2020  
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 Revision Note: New product

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**