

**MATERIAL SAFETY DATA SHEET**  
**EMERALD TRIANGLE MAGNUM**  
12-1-11

**SECTION 1. MATERIAL IDENTIFICATION**

**Product Name:** Magnum

**Chemical Family:** aqueous solution of magnesium sulfate and thiamine hydrochloride

**Product Use:** plant nutrient solution

**Manufactured by:** Emerald Triangle, P. O. Box 701, Fortuna, CA 95540  
(707)-725-4119 Fax (707)-725-3747

**For Emergency Day or Night Call:** CHEMTREC – Domestic North America 800-424-9300,  
International 703-527-3887 (collect calls accepted)

**SECTION 2. INGREDIENTS AND OCCUPATIONAL EXPOSURE LIMITS**

**Ingredients:** magnesium sulfate, thiamine hydrochloride (vitamin B1)

**Exposure Limits:** The ingredients in Magnum when inhaled in a powder form are known to be irritants to the upper respiratory tract. As long as these chemicals remain in aqueous solution and do not become aerosolized, they are not an inhalation hazard.

**SECTION 3. HAZARDS IDENTIFICATION**

HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

**NFPA Ratings:** 0 Flammability / 0 Reactivity / 0 Oxidizer

**Potential Health Effects**

**Primary Entry Routes:** ingestion, inhalation, and skin contact.

**Target Organs:** Gastrointestinal system, blood system, skin, mucous membranes.

**Ingestion:** Ingestion can cause gastro-intestinal distress, with abdominal pain, nausea, and vomiting.

**Eye:** May cause irritation, redness, and pain.

**Skin:** No known adverse effects.

**Inhalation:** Irritation

**Carcinogenicity:** IARC, NTP and OSHA do not list as a carcinogen.

**Medical Conditions Aggravated by Long-Term Exposure:** Unknown

**Chronic Effects:** No known chronic hazards.

**Other:** None

#### Section 4. First Air Measures

**Ingestion:** Give several glasses of water for dilution and encourage vomiting. If symptoms persist, seek medical attention.

**Eye Contact:** Do not allow victim to rub or keep eyes tightly shut. Remove contact lenses then gently lift eyelids and flush immediately and continuously with flooding amount of water for at least 15 minutes. Consult a physician or ophthalmologist if pain or irritation develops.

**Skin Contact:** Not applicable

**Inhalation:** Remove exposed person to fresh air and support breathing, if necessary. Consult a physician as soon as possible.

**After First Aid:** Get appropriate community medical support.

#### Section 5. Fire and Explosion Data

**Flash Point:** Unknown

**Auto-ignition Temperature:** Unknown

**LEL:** Unknown

**Flammability Classification:** Magnum is not combustible.

**Extinguishing Media:** Use dry chemical, carbon dioxide, water spray, fog or foam for extinguishing surrounding fire. .

**Unusual Fire or Explosion Hazards:** None known

**Hazardous Combustion Products:** Non combustible. At very high temperatures, magnesium oxide, sulphur dioxide and sulphur trioxide may be generated.

**Fire Fighting Instructions:** Keep fire exposed containers cool with water spray. Remove containers from fire area, if it can be done safely. Do not release run off from fire control methods to sewers or waterways.

**Fire Fighting Equipment:** Because fire may product toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece.

#### Section 6. Accidental Release Measures

**Spill/Leak Procedures:** Wipe up with absorbent towels or mop.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

#### Section 7. Handling and Storage

**Handling Precautions:** Avoid ingestion, skin contact, eye contact, and inhalation.

**Storage Requirements:** Keep in tightly closed containers stored in a cool, dry, ventilated area.

**Regulatory Requirements:** Follow applicable OSHA regulations

## Section 8. Exposure Controls/Personal Protection

**Administrative Controls:** Avoid breathing mist.

**Respiratory Protection:** If this product is used a directed, respiratory protection is not required. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH -approved respirator. If respirators are used, OSHA requires a written respiratory protection program that include, at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Eye Protection:** When handling Magnum, protective eyewear or goggles should be worn per OSHA regulations (29 CFR 1910.134). Contact lenses pose a special hazard. Soft lenses may absorb irritants, and all contact lenses concentrate irritants. Particles may adhere to contact lenses and cause corneal damage.

**Protective Clothing:** Wear when the possibility of skin or clothing contamination may exist. Wear neoprene or nitrile gloves when directly handling the product.

**Safety Stations:** Eye wash stations, quick drench showers, and washing facilities should be readily accessible to workers handling large quantities of Magnum.

**Contaminated Equipment:** Remove this material from shoes and equipment. Launder contaminated clothing before wearing.

**Comments:** Never eat, drink or smoke in work areas. Practice good personal hygiene after using this product, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## Section 9. Physical and Chemicals Properties

**Physical State:** Aqueous solution.

**Density:** 1- 1.2

**pH:** 6-8.5

**Appearance:** Clear to tan liquid with slight odor.

**Vapor Pressure:** Unknown

**Water Solubility:** Soluble

**Other Solubilities:** Unknown

**Freezing Point:** Unknown

**Viscosity:** Unknown

## Section 10 Stability and Reactivity

**Stability:** Stable at room temperature in closed containers, under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization does not occur.

**Chemical Incompatibilities:** None known

**Conditions to Avoid:** High temperatures.

**Hazardous Decomposition Products** Magnesium oxide, sulphur dioxide and sulphur trioxide.

## Section 11. Toxicological Information

See Section 2

### **Section 12. Ecological Information**

**Ecotoxicity:** Not a listed toxic chemical under SARA Title III, section 313 40 CFR Part 372. Not a CERCLA Hazardous substance under 40 CFR Part 302.

**Environmental Fate:** Not expected to be significant.

**Environmental Degradation:** Unknown

### **Section 13. Disposal Considerations**

**Waste Disposal:** Follow Federal, State and local regulations.

### **Section 14. Transportation Information**

This product is not regulated hazardous material for transportation.

### **Section 15. Regulatory Information**

EPA Regulations: Not listed

### **Section 16. Other Information**

Emerald Triangle Magnum is a plant nutrition product. Information assembled for this Material Safety Data Sheet is for the use of this product as intended by the manufacturer. Users should take all precautions recommended herein while working with this product.

Emerald Triangle Products provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in using this product