



# SAFETY DATA SHEET

Product: MARC 70-G GRANULAR COPPER SULFATE  
Form R04132

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: **MARC 70-G GRANULAR COPPER SULFATE**

SDS DATE: 05/30/2019

SUPPLIER: Mid-American Research Chemical Corp.

ADDRESS: P. O. Box 927 Columbus, NE 68602-0927

PHONE: 402-564-7104 FAX: 402-563-1290

EMERGENCY PHONE: InfoTrac 1-800-535-5053

E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Root and algae control.

PREPARED BY: MARC

## SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Acute toxicity-oral category 4, eye damage/irritation category 1, acute aquatic toxicity category 1, chronic aquatic toxicity category 1.



**SIGNAL WORD AND HAZARD AND PRECAUTIONARY STATEMENTS: DANGER** - Harmful if swallowed. Causes serious eye damage. Very toxic to aquatic life and with long-lasting effects. Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Wash hand thoroughly after handling. Do not eat, drink or smoke when using product. Avoid release to the environment. Wear protective gloves, clothing and eye protection. IF SWALLOWED: Immediately call a Poison Center (800-222-1222) or physician if you feel unwell. Rinse mouth. IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove victim to fresh air and keep in a position comfortable for breathing. IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Center (800-222-1222) or physician. Collect spillage. Dispose of in accordance with local, state and federal regulations.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT.</u>
Copper (II) Sulfate Pentahydrate	7758-99-8	>99

## SECTION 4: FIRST AID MEASURES

### Potential Health Effects: Eyes

Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

### First Aid: Eyes

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

### Potential Health Effects: Skin

This product may cause irritation of the skin with pain, itching and redness. Severe overexposure can cause skin burns. Prolonged exposure may cause dermatitis and eczema.

### First Aid: Skin

Remove all contaminated clothing. For skin contact, wash thoroughly with soap and water for at least 20 minutes. Seek immediate medical attention if irritation develops or persists.

### Potential Health Effects: Ingestion

Harmful or fatal if swallowed. May cause gastrointestinal irritation with symptoms such as nausea, vomiting, and diarrhea. Ingestion may cause degeneration of liver, kidney, or renal failure. Persons who survive ingestion may develop granulomatous lesions of the kidney. Ingestion of large amounts may lead to convulsions, coma or death.

### First Aid: Ingestion

DO NOT INDUCE VOMITING. Have victim rinse mouth thoroughly with water, if conscious. Never give anything by mouth to a victim who is unconscious or having convulsions. Contact a physician or poison control center immediately.



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## Potential Health Effects: Inhalation

May irritate the nose, throat and respiratory tract. Symptoms can include sore throat, coughing and shortness of breath. In severe cases, ulceration and perforation of the nasal septum can occur. If this material is heated, inhalation of fumes may lead to development of metal fume fever. This is a flu-like illness with symptoms of metallic taste, fever and chills, aches, chest tightness and cough. Repeated inhalation exposure can cause shrinking of the lining of the inner nose.

## First Aid: Inhalation:

Remove source of contamination or move victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth- to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Get immediate medical attention.

## First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically. Basic Treatment: Establish a patent airway. Suction if necessary. Watch for signs of respiratory insufficiency and assist ventilations if necessary. Administer oxygen by non-rebreather mask at 10 to 15 L/minutes. Monitor for shock and treat if necessary. For eye contamination, flush eyes immediately with water. Irrigate each eye continuously with normal saline during transport. Do not use emetics. For ingestion, rinse mouth and administer 5 mL/kg up to 200 mL of water for dilution if the patient can swallow, has a strong gag reflex, and does not drool. Administer activated charcoal. Advanced Treatment: Consider orotracheal or nontracheal intubation for airway control in the patient who is unconscious. Start an IV with lactated Ringer's SRP: "To keep open", minimal flow rate. Watch for signs of fluid overload. For hypotension with signs of hypovolemia, administer fluid cautiously. Consider vasopressors if hypotensive with a normal fluid volume. Watch for signs of fluid overload. Use proparacaine, hydrochloride to assist eye irrigation.

## SECTION 5: FIRE FIGHTING MEASURES

**General Fire Hazards:** Copper Sulfate Pentahydrate is not combustible but may decompose in the heat of a fire to produce corrosive and/ or toxic fumes.

**Hazardous Combustion Products:** Sulfur oxides and copper fumes.

**Extinguishing Media:** Copper Sulfate Pentahydrate is not flammable. Use extinguishing media suitable for surrounding fire.

**Fire Fighting Equipment/Instructions:** Firefighters should wear full protective clothing including self-contained breathing apparatus. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Containment Procedures

Stop the flow of material, if this can be done without risk. Contain the discharged material. If sweeping of a contaminated area is necessary use a dust suppressant agent, which does not react with product (see Section 10 for incompatibility information).

### Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Shovel the material into waste container. Thoroughly wash the area after a spill or leak clean-up. Prevent spill reinstatement from contamination of storm drains, sewers, soil or groundwater.

### Evacuation Procedures

Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering. Keep materials which can burn away from spilled material. In case of large spills, follow all facility emergency response procedures.

### Special Procedures

Remove soiled clothing and launder before reuse. Avoid all skin contact with the spilled material. Have emergency equipment readily available.

## SECTION 7: HANDLING AND STORAGE

**GENERAL HANDLING:** It is a violation of Federal Law to use this product in a manner inconsistent with its labeling, when used as a pesticide. Do not breathe dust. Avoid all contact with skin and eyes. Use this product only with adequate ventilation. Wash thoroughly after handling.

**OTHER PRECAUTIONS:** KEEP OUT OF REACH OF CHILDREN!! CAREFULLY READ ENTIRE LABEL BEFORE USE.

**STORAGE:** Keep in original container in locked storage area. Keep tightly closed when not in use. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store away from incompatible chemicals (see section 10, Stability and Reactivity). Storage areas should be made



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of fire-resistant materials. Post warning and "NO SMOKING" signs in the storage and use areas, as appropriate. Use corrosion-resistant structural materials, lighting, and ventilation systems in the storage area. Floors should be sealed to prevent absorption of this material. Have appropriate extinguishing equipment in the storage area (i.e., sprinkler system, portable fire extinguishers). Empty containers may contain residual particulates; therefore, empty containers should be handled with care. Do not cut, grind, weld, or drill near this container. Never store food, feed, or drinking water in containers that held this product. Keep this material away from food, drink and animal feed. Inspect all incoming containers before storage, to ensure containers are properly labeled and not damaged. Do not store this material in open or unlabeled containers. Limit quantity of material stored. Store in suitable containers that are corrosion-resistant.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### INGREDIENT

Copper (II) Sulfate Pentahydrate

### CAS NO.

7758-99-8

### EXPOSURE GUIDELINES:

**A. General Product Information:**  
**B. Component Exposure Limits:**

Follow the applicable exposure limits.

The exposure limits given are for Copper & Inorganic Compounds, as Cu 7440-50-8), Copper fume as Cu or Copper dusts and mists, as Cu.

**ACGIH:** 1 mg/m<sup>3</sup> TWA (dusts & mists)

0.2 mg/m<sup>3</sup> TWA (fume)

**OSHA/NIOSH:** 1 mg/m<sup>3</sup> TWA (dusts & mists)

0.1 mg/m<sup>3</sup> TWA (fume)

### COMPONENT RELATED REGULATORY INFORMATION:

This product may be regulated, have exposure limits or other information identified as the following: Copper (7440-50-8) and inorganic compounds, as Cu, Copper (7440-54-8) dusts and mists, as Cu and Copper fume, Cu.

**ENGINEERING CONTROLS/VENTILATION:** Use mechanical ventilation such as dilution and local exhaust. Use a corrosion-resistant ventilation system and exhaust directly to the outside. Supply ample air replacement. Provide dust collectors with explosion vents.

**RESPIRATORY PROTECTION:** If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U. S. State regulations.

**EYE PROTECTION:** Wear safety glasses with side shields (or goggles) and a face shield, if this material is made into solution. If necessary, refer to U. S. OSHA 29 CFR 1910.133. Have a safety shower or eye-wash fountain available.

**SKIN PROTECTION/PROTECTIVE GLOVES:** Wear chemically-impervious gloves, made of any waterproof material to avoid skin contact. If necessary, refer to U. S. OSHA 29 CFR 1910.138.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Impervious clothing, boots and coveralls as needed to prevent skin contact. Have a safety shower or eye-wash fountain available. Use good hygiene practices when handling this material including changing and laundering work clothing after use. Discard contaminated shoes and leather goods.

**WORK HYGIENIC PRACTICES:** Wash hands thoroughly after handling material. Do not eat, drink or smoke in work area.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE/PARTICLE SIZE:** Crystals, medium size, approximately ¼ inch

**PHYSICAL STATE/COLOR:** Solid, Blue

**ODOR:** Odorless

**pH:** 3.7-4.2 (10% soln.)

**SOLUBILITY IN WATER:** 31.6 g/100 cc (@ 0 deg C)

**SPECIFIC GRAVITY:** 2.28 @ 15.6 deg C (H<sub>2</sub>O = 1)

**FREEZING/MELTING POINT:** 150°C (302°F)

**BOILING POINT:** 560° C (1040 °F) [decomposes]

**FLASH POINT/METHOD USED:** Not flammable.

**METHOD USED:** Not Applicable

**UPPER FLAMMABILITY LIMITS (UEL):** Not Applicable

**LOWER FLAMMABILITY LIMITS (LEL):** Not Applicable

**EVAPORATION RATE:** (water = 1) N/A

**VAPOR PRESSURE (mmHg):** 20 torr at 22.5 deg C

**VAPOR DENSITY (AIR = 1):** 8.6

**PARTITION COEFFICIENT,**

**n-OCTANOL/WATER:** N/A



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**AUTO-IGNITION TEMPERATURE:** Not Applicable  
**DECOMPOSITION TEMPERATURE:** N/A  
**VISCOSITY:** N/A

## SECTION 10: STABILITY AND REACTIVITY

**REACTIVITY/ STABILITY:** Copper Sulfate Pentahydrate is hygroscopic, but stable when kept dry, under normal temperature and pressures.

**CONDITIONS TO AVOID:** Avoid high temperatures, exposure to air and incompatible materials.

**INCOMPATIBILITY (MATERIAL TO AVOID):** Copper Sulfate causes hydroxylamine to ignite and the hydrated salt is vigorously reduced. Solutions of sodium hypobromite are decomposed by powerful catalytic action of cupric ions, even as impurities. Copper salts, including Copper Sulfate may react to form explosive acetylides when in contact with acetylene or nitromethane. Contact with reducing agents, can cause a vigorous reaction, especially in solution. This product can corrode aluminum, steel and iron. Copper Sulfate Pentahydrate is incompatible with magnesium, strong bases, alkalines, phosphates, acetylene, hydrazine, and zirconium.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Sulfur oxides and Copper oxides.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID (POLYMERIZATION):** None known.

## SECTION 11: TOXICOLOGICAL INFORMATION

### ACUTE AND CHRONIC TOXICITY

#### GENERAL PRODUCT INFORMATION

Acute toxicity is largely due to the corrosive (acidic) properties of this material. Harmful or fatal if swallowed. Product is an eye and skin irritant, and may cause burns. Product is a respiratory tract irritant, and inhalation may cause nose irritation, sore throat, coughing, and chest tightness and possibly, ulceration and perforation of the nasal septum. Chronic: Long term skin overexposure to this product may lead to dermatitis and eczema. Prolonged or repeated eye contact may cause conjunctivitis and possibly corneal abnormalities. Chronic over exposure to this product may cause liver and kidney damage, anemia and other blood cell abnormalities.

#### COMPONENT ANALYSIS – LD50/LC50

##### Copper Sulfate Pentahydrate (7758-99-8)

Oral-rat LD50 – 330 mg/kg (testing done June 2006, Consumer Product Testing Co., Inc.); Intraperitoneal-Rat LD50: 18,700 mg/kg; Intraperitoneal-rat LD50: 20 mg/kg; Subcutaneous-rat LD50: 43 mg/kg; Intravenous-rat LD50: 48900 µg/kg; Unreported-rat LD50: 520 mg/kg; Oral-mouse LD50: 369 mg/kg; Intraperitoneal-Mouse LD50: 33 mg/kg; Intraperitoneal-mouse LD50: 7182 µg/kg; Intravenous-mouse LD50: 23300 µg/kg.

#### COMPONENT ANALYSIS – TDL0/LDLo

##### Copper Sulfate Pentahydrate (7758-99-8)

Oral-man LDLo: 857 mg/kg; Oral-Human LDLo: 50 mg/kg; Behavioral: somnolence (general depressed activity); Kidney, Urethra, Bladder: changes in tubules (including acute renal failure, acute tubular necrosis); Blood: hemorrhage; Oral-Human TDLo: 11 mg/kg; Gastrointestinal: gastritis; Gastrointestinal: hypermotility, diarrhea, nausea or vomiting; Oral-Human LDLo: 272 mg/kg; liver, kidney, Blood effects; Oral-Human LDLo: 1088 mg/kg; Oral-child: 150 mg/kg; Kidney, Urethra, Bladder: changes in tubules (including acute renal failure, acute tubular; necrosis); Blood: other hemolysis with or without anemia; unknown-Man LDLo: 221 mg/kg; Oral-Woman TDLo: 2400 mg/kg/day; Gastrointestinal tract effects; DNA Inhibition-Human: lymphocyte 76 mmo1/L; Oral-woman LDLo: 100 mg/kg; Vascular: Blood pressure lowering not characterized in autonomic section; Liver: hepatitis (hepatocellular necrosis), diffuse; Kidney, Urethra, Bladder: changes in tubules (including acute renal failure, acute tubular necrosis); Oral-Human LDLo; 143 mg/kg; Pulmonary system effects, Gastrointestinal tract effects; Oral-rat TDLo: 915 mg/kg/1 year-intermittent: Cardiac: changes in coronary arteries; Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Oral-rat TDLo: 157 mg/kg/6 weeks-intermittent: Endocrine: changes in adrenal weight; Nutritional and Gross metabolic: weight loss or decreased weight gain; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: dehydrogenases; Oral-rat TDLo: 7530 mg/kg/30 days-intermittent: Blood: changes in serum composition (e.g. TP, bilirubin, cholesterol); Blood: changes in erythrocyte (RBC) count; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels:- multiple enzyme effect; Oral-rat TDLo: 2gm/kg/20 days-intermittent: Liver: other changes; Biochemical: Enzyme inhibition, induction, or change in blood or tissue levels: phosphatases, Enzyme inhibition, induction, or change in blood or tissue levels; Intraperitoneal-rat TDLo: 791 mg/kg/18 weeks-intermittent: Nutritional and Gross Metabolic: weight loss or decreased weight gain; Intraperitoneal-rat TDLo: 7500 µg/kg: female 3 day(s) after conception: Reproductive: Fertility: other measures of fertility; Subcutaneous-rat TDLo: 12768 µg/kg: male 1 day(s) pre-mating: Reproductive: Paternal Effects: testes, epididymis, sperm duct; Intratesticular-rat TDLo: 3192 µg/kg: male 1 day(s) pre-mating: Reproductive: Paternal Effects: spermatogenesis (incl.genetic material, sperm morphology, motility, and count), testes, epididymis, sperm duct; Oral-mouse TDLo: 3 gm/kg/8 weeks-continuous: Blood: changes in spleen; Immunological Including Allergic: decrease in cellular immune response, decrease in humoral immune response; Oral-mouse TDLo: 2 gm/kg/3 weeks continuous: Blood: changes in spleen; Immunological Including Allergic: decrease in cellular immune response, decrease in humoral immune response; Subcutaneous-mouse LDLo: 500 µg/kg; Subcutaneous-mouse TDLo: 12768 µg/kg: male 30 day(s) pre-mating: Reproductive: Paternal Effects: testes, epididymis, sperm duct; Intravenous-mouse TDLo: 3200 µg/kg: female 8 day(s) after conception: Reproductive: Effects on



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Embryo or Fetus: fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Central Nervous System, cardiovascular (circulatory) system; Intravenous-mouse TDLo: 3200 µg/kg; female 7 day(s) after conception: Reproductive: Fertility: post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants); Oral-Dog, adult LDLo: 60 mg/kg; Intravenous-guinea pig TDLo: 2 mg/kg; Subcutaneous-Guinea Pig, adult LDLo: 62 mg/kg; Oral-Pigeon LDLo: 1000 mg/kg; Oral-Domestic animals (Goat, Sheep) LDLo: 5 mg/kg; Oral-Bird-wild species LDLo: 300 mg/kg; Intravenous-frog LDLo: 25 mg/kg; Parental-Chicken TDLo: 10 mg/kg; Tumorigenic: equivocal tumorigenic agent by RTECS criteria; Endocrine: tumors; Oral-pig TDLo: 140 mg/kg; female 1-15 week(s) after conception, lactating female 4 week(s) post-birth: Reproductive: Effects on Newborn: biochemical and metabolic; Intravenous-hamster TDLo: 2130 µg/kg; female 8 day(s) after conception: Reproductive: Fertility: postimplantationmortality (e.g. dead and/or resorbed implants per total number of implants), Specific Developmental Abnormalities: Central Nervous System, body wall.

## CARCINOGENICITY:

**A: General Product Information: Copper Sulfate Pentahydrate (7758-99-8)** Cytogenetic Analysis-Rat/ast 300 mg/kg

**B: Component Carcinogenicity: Copper dusts and mists, as Cu (7440-50-8)**

**EPA:** EPA-D (Not classifiable as to Human Carcinogenicity – inadequate human and animal evidence of carcinogenicity or no data available)

**EPIDEMIOLOGY:** No information available.

**NEUROTOXICITY:** Has not been identified.

**MUTAGENICITY:** Human and animal mutation data are available for Copper Sulfate Pentahydrate; these data were obtained during clinical studies on specific human and animal tissues exposed to high doses of this compound.

**TERATOGENICITY:** There are no reports of teratogenicity in humans. Animal studies indicate that a deficiency or excess of copper in the body can cause significant harm to developing embryos. The net absorption of copper is limited and toxic levels are unlikely from industrial exposure.

**OTHER TOXICOLOGICAL INFORMATION:** Individuals with Wilson's disease are unable to metabolize copper. Thus, persons with pre-existing Wilson's disease may be more susceptible to the effects of overexposure to this product.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICITY:

**A: General Product Information:** Harmful to aquatic life in very low concentrations. Copper Sulfate Pentahydrate is toxic to fish and marine organisms when applied to streams, rivers, ponds or lakes.

**B: Ecotoxicity: Copper Sulfate Pentahydrate (7758-99-8)**

**ENVIRONMENTAL FATE:** If released to soil, copper sulfate may leach to groundwater, be partly oxidized or bind to humic materials, clay or hydrous oxides of iron and manganese. In water, it will bind to carbonates as well as humic materials, clay and hydrous oxides of iron and manganese. Copper is accumulated by plants and animals, but it does not appear to biomagnify from plants to animals. In air, copper aerosols have a residence time of 2 to 10 days in an unpolluted atmosphere and 0.1 to greater than 4 days in polluted, urban areas.

LC50 (*Lepomis machochirus* bluegill) wt 1.5 g = 884 mg/L at 18°C, static bioassay (95% confidence limit 707-1, 100 mg/L) (technical material, 100% (about 2.5% elemental copper): LC50 (*Leopmis cyanellus*, Green Sunfish) = 1.1 g, 3,510 µg/L at °C; LC50 (Pimephales promelas, Fat-head minnow) = 1.2 g, 838 µg/L at 18°C; LC50 (*Crassius auratus*, Goldfish) = 0.9 g, 1380 µg/L at 18°C; LC50 (*Crassius auratus*, Goldfish) = 0.1-2.5 mg/L; LC50 (EEL) = 0.1-2.5 mg/L; LC50 (*Salmo gairdneri*, Rainbow trout) = 1.6 g, 135 µg/L at 18°C; LC50 (*Salmo gairdneri*, Rainbow trout) 48 hours = 0.14 ppm; LC50 (*Daphnia magna*) no time specified = 0.182 mg/L; lc50 (*Salmo gairdneri*, Rainbow trout) no time specified = 0.17 mg/L; LC50 (*Lepomis machochirus* bluegill) no time specified = 1.5 G, 884 µg/L at 18°C; lc50 (Stripped Bass) 96 hours = 1 ppm or lower; LC50 (Prawn) 48 hours = 0.14; LC50 (Shrimp) 96 hours = 17.0 ppm copper; LC50 (Blue Crab) 96 hours = 28 ppm copper; LC50 (Oyster) 96 hours = 5.8 ppm copper; LC50 (*Viviparus bengalensis* snail) 96 hours = 0.060 ppm copper (at 32.5 °C; 0.066 ppm copper static bioassay); LC50 (*Viviparus bengalensis* snail) 96 hours = 0.09 ppm copper (at 27.3°C; 0.066 ppm copper static bioassay); LC50 (*Viviparus bengalensis* snail) 96 hours = 0.39 ppm copper (at 20.3 C; 0.066 ppm copper static bioassay).

## SECTION 13: DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL METHOD--US EPA Waste Number & Descriptions:

**A. General Product Information:** This product is a registered pesticide.

**B. Component Waste Numbers:** No EPA Waste Numbers are applicable for this product's components.

**DISPOSAL INSTRUCTIONS:** All wastes must be handled in accordance with local, state and federal regulations. This material can be converted to a less hazardous material by weak reducing agents followed by neutralization. Do not reuse empty containers. Do not rinse unless required for recycling. If partly filled, call local solid waste agency for disposal instructions. Never pour unused product down drains or on the ground.



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**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticides, spray mixtures, or rinsate is a violation of U.S. Federal Law. If these wastes cannot be disposed of by use, according to product label instruction, contact your U.S. State Pesticide or Environmental Control Agency, or the hazardous waste representative at the nearest U.S. EPA Regional Office.

## SECTION 14: TRANSPORT INFORMATION

### U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers):

**CONTAINER SIZES(S):** 50-pound Bags

**PROPER SHIPPING NAME:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ( Cupric Sulfate)

**HAZARD CLASS:** 9

**ID NUMBER:** UN3077

**PACKING GROUP:** PGIII

**LABEL STATEMENT:** MISC HM 9

## SECTION 15: REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS

#### A. General Product Information

Copper Sulfate Pentahydrate (CAS# 7758-99-8) is listed as a Priority and Toxic Pollutant under the Clean Water Act.

**B. Component Analysis:** This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4): **Copper Compounds (7440-50-8).**

**SARA 313:** final: RQ – 5000 pounds (2270 kg) Note: No reporting of releases of this substance is required if the diameter of the pieces of the solid metal released is equal to or greater than 0.004 inches. **Cupric Sulfate (7758-98-7).** **CERCLA:** final: RQ = 10 pounds (4.54 kg)

#### C. SARA 311/312 Tier II Hazard Ratings:

COMPONENT	CAS#	FIRE HAZARD	REACTIVITY HAZARD	PRESSURE HAZARD	IMMEDIATE HEALTH HAZARD	CHRONIC HEALTH HAZARD
Copper Sulfate Pentahydrate	7758-99-8	No	No	No	Yes	Yes

## SECTION 16: OTHER INFORMATION

**HMIS/NFPA Ratings:** Health = 2  
Flammability = 0  
Reactivity = 0  
Other = -  
Protection = -

**REVISION DATE:** 05/30/2019

**DISCLAIMER:** While the information contained herein is believed to be correct, no warranties are made with respect thereto, and all liability from reliance thereon is disclaimed.