

BEST VETERINARY SOLUTIONS, INC

Material Safety Data Sheet

Product Name: Manage Size: All  
Manufacturer: BVS Address: Willmar, MN  
Emergency Telephone Number: 320-235-8611 Updated: 4/23/01

Section I IDENTIFICATION

Trade Name: Manage  
General ID: Proprietary mixture containing the following components:  
Copper Sulfate Pentahydrate (CuSO<sub>4</sub>·5H<sub>2</sub>O) Cas 7758-99-8  
Ammonium Carbonate (NH<sub>4</sub>)<sub>2</sub>CO<sub>3</sub> Cas 0506-87-6

Section II HAZARDOUS COMPONENTS

Ingredient	ACGIH(TLV)/OSHA(PEL)	Note
Copper Sulfate Pentahydrate Cas# 7758-99-8	1mg/m <sup>3</sup>	(1)
Ammonium Carbonate Cas# 506-87-6		(2)

Notes:

- (1) As copper dusts od mists (Cas 7740-50-8)
- (2) TLV/PEL not established for this material

Components not precisely identified are proprietary and/or not hazardous.

Section III Physical Data

Boiling Point: N/A	Vapor Pressure: N/A
Specific Vapor Density: N/A	Specific Gravity: N/A
Evaporation Rate: N/A	Solubility in water: Infinite
Percent volatile by volume: N/A	Appearance: Purple, transparent freely flowing liquid
Odor: Odorless	

Section IV Fire And Explosion Information

Flash Point: N/A Explosion Limit: N/A  
Extinguishing media: Water, fog, carbon dioxide, or dry chemical  
Hazardous decomposition products: May form toxic materials.  
If dried and heated, ammonia may be evolved beginning at 136 degrees F. Dried copper sulfate may evolve sulfur trioxide above 600 degrees C.  
Special Fire And Explosion Hazards: N/A  
Firefighting Procedures: Wear a self-contained breathing apparatus with a full face piece operated in the positive pressure demand with appropriate turn-out gear and chemical resistant personal protective equipment.

## Section V Health Hazard Data

Permissible exposure level: N/A

**EYE IRRITATION:** Corrosive to eyes. May cause severe irritation with redness, pain and blurred vision.

**SKIN CONTACT:** Slight skin irritant. Excessive exposure, especially if prolonged, may produce skin irritation. Repeated exposure may cause allergic contact dermatitis. May cause irritation or burns on wet skin.

**SKIN ABSORPTION:** Moderately toxic

**INHALATION:** May cause irritation to mucous membranes. Exposure to flames may result in dizziness, fatigue, metallic taste, nausea, vomiting, metal fume fever with chills, including fever, aching muscles, dry throat and headache. Avoid inhaling spray mists. Strong irritant to the nose and throat.

**INGESTION:** May result in gastrointestinal irritation, salivation, nausea, vomiting, diarrhea, capillary damage, liver and kidney damage, and central nervous system stimulation followed by depression. Jaundice, pain in the liver, and hemolytic anemia may be associated with acute human poisonings.

### FIRST AID MEASURES:

**EYE CONTACT:** Hold eyelids open and flush with water for 15-20 minutes until no evidence of chemicals remain. Get professional medical attention.

**SKIN CONTACT:** Remove contaminated clothing and shoes. Wash exposed area with plenty of soap and water for 15-20 minutes until no evidence of chemicals remain. If symptoms persist, seek medical attention.

**INHALATION:** Move individual away from exposure and in fresh air. If breathing difficult, administer oxygen. If breathing has stopped, give artificial respiration. Seek immediate medical attention.

**INGESTION:** Drink 1 to 2 glasses of water and induce vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Get professional medical attention.

## Section VI Reactivity Data

**HAZARDOUS POLYMERIZATION:** Cannot occur

**STABILITY:** Stable

**INCOMPATIBILITY:** Corrosive to mild steel. Store solution in plastic, rubber, stainless steel. Avoid temperatures over 110 degrees F.

## Section VII Spill Or Leak Procedures

### STEPS TO BE TAKEN IN CASE OF MATERIAL IS RELEASED OR SPILLED

**SMALL SPILL:** Neutralize spills with soda ash or lime. Sweep up material and place in an appropriate chemical waste container for disposal.

**LARGE SPILL:** Neutralize spills with soda ash or lime. Shovel material into appropriate chemical waste containers. Thoroughly sweep area of spill to clean up any residual material.

**WASTE DISPOSAL METHOD:**

**SMALL SPILL:** Dispose of in accordance with all applicable local, state, and federal regulations.

**LARGE SPILL:** Dispose of in accordance with all applicable local, state, and federal regulations.

**Section VIII Protective Equipment To Be Used**

**RESPIRATORY EQUIPMENT:** If needed use a NIOSH/MSH jointly approved dust respirator.

**VENTILATION:** Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected, or apparent adverse effects)

**PROTECTIVE GLOVES:** Wear impervious gloves, such as neoprene, nitrile rubber, polyvinyl chloride.

**EYE PROTECTION:** Chemical splash goggles in compliance with OSHA regulation are advised; however, OSHA regulations also permit other type safety glasses.

**OTHER PROTECTIVE EQUIPMENT:** Normal work clothing covering arms and legs.

**Section IX Special Precautions or Other Comments**

Store in a clean, dry place. Avoid freezing

Containers of this material may be hazardous when emptied, since emptied containers retain product residues (vapor, liquid, and/or solid). All hazard precautions given in the data sheet must be observed.

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Best Veterinary Solutions, Inc. knows of no medical condition other than those noted on this MSDS. Which are generally recognized as being aggravated by exposure to this product.