

# SAFETY DATA SHEET

## CUPRIC SULFATE , Pentahydrate

### SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

**BioShop Canada Inc.**  
**5480 Mainway**  
**Burlington, Ontario L7L 6A4**  
**1-800-234-1179**  
**Emergency Telephone No.: CANUTEC 1-613-996-6666**  
**Chemical Name:** Cupric sulfate pentahydrate  
**Catalog Number:** CUS803

### SECTION 2 HAZARDS IDENTIFICATION

#### GHS Classification

#### CLASSIFICATION:

Carcinogen, 1B  
Germ cell mutagenicity, 1B  
Reproductive toxicity, 2  
Acute toxicity Oral, 3  
Acute toxicity Inhalation, 4  
Acute toxicity Dermal, 3  
Skin irritant 2  
Eye irritant 2  
Specific target organ toxicity-repeated, 1  
Acute Aquatic toxicity, 2

#### PICTOGRAM:



**SIGNAL WORD:** Danger

#### HAZARD STATEMENTS:

H301-Toxic if swallowed  
H312-Harmful in contact with skin  
H315- Causes skin irritation  
H317- May cause an allergic skin reaction  
H319- Causes serious eye irritation  
H332-Harmful if inhaled  
H340- May cause genetic defects  
H350- May cause cancer  
H361-Suspected of damaging fertility of the unborn  
H402- Toxic to aquatic life

#### PRECAUTIONARY STATEMENTS:

P201- Obtain special instructions before use..  
P261- Avoid breathing dust/fume/gas/mist/vapors/spray  
P280-wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P304-P340- IF INHALED remove to fresh air and keep at rest in a position comfortable for breathing.

P302+P352- IF ON SKIN: wash with plenty of soap and water.  
P305+P351+P338- IF IN EYES: rinse cautiously with water for several minutes. remove contact lenses if present and easy to do. Continue rinsing.

#### Potential Health Effects

**Routes of entry:** Eyes, skin, inhalation, ingestion.  
**Target Organs:** Eyes, CNS, kidneys, reproductive system  
**Eyes:** Toxic when in contact with eyes. Harmful. Causes irritation.  
**Skin:** Toxic when in contact with skin. Readily absorbed through skin. harmful. Can cause dermatitis. Effects can result from single exposure, or with repeated contact. Peeling and redness may occur at exposure sites.  
**Ingestion:** Harmful if ingested. Initial symptoms, numbness, tingling and touch tenderness. Prolonged exposure leading to coldness of extremities, excessive sweating, bluish-red and peeling of palms, marked fatigue and limb weakness.  
**Inhalation:** Can be absorbed through the lungs to produce the signs and symptoms of neurotoxicity as described above.

**CHRONIC HEALTH HAZARDS;** repeated exposure may cause dermatitis. May cause cancer. May cause CNS disturbances.

### SECTION 3 COMPOSITION/ INGREDIENTS

	CAS #	%
Copper sulfate : Pentahydrate	7758-99-8	>99%

**Molecular Formula:** CuO4S.5H2O  
**Molecular Weight:** 249.68

### SECTION 4 FIRST AID MEASURES

**Eyes:** Flush eyes with water , GET MEDICAL ATTENTION  
**Skin:** In case of contact, flush area immediately with water. Remove clothing. GET MEDICAL ATTENTION.  
**Inhalation:** Remove victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen and GET MEDICAL ATTENTION.  
**Ingestion:** wash mouth with water. Do not induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY.

### SECTION 5 FIRE FIGHTING MEASURES

**Combustible solid. When dealing with fire wear self-contained breathing apparatus. Avoid hazardous vapors and dust.**  
**Flammable:** No  
**Flash Point:** N/A  
**Autoignition Temperature:** 464C  
**Extinguishing Media:** Use water spray, foam, dry chemical or carbon dioxide.  
**Explosion Data:** Not available

### SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.  
**Leak and Spill Procedures:** Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container

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### SECTION 7 HANDLING AND STORAGE

**Handling:** Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize dust generation. Use in fume hood.

**Storage Conditions:** Room temperature. Keep away from heat (above 50C) and ignition source.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure limits:**

ACGIH: 0.03 mg/m<sup>3</sup> TWA

NIOSH: 0.03mg/m<sup>3</sup> TWA 60 mg/m<sup>3</sup> IDLH

OSHA: 0.3 mg/m<sup>3</sup> TWA

Use adequate ventilation. AVOID DUST GENERATION.

Wear appropriate protective equipment to prevent eye and skin exposure.

Wear appropriate respirator to prevent lung irritation.

**Personal Protection:** Lab coat, safety goggles, rubber gloves.

**Ventilation:** Local exhaust systems. Use fume hood

**Respiratory protection:** use NIOSH/MSHA approved respirator.

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Crystalline solid

**Appearance and Odor:** blue- odorless

**Melting Point:** 110° C

**Boiling Point:** 150° C

**Specific Gravity:** N/A

**Vapor Density:** N/A

**Water Solubility:** yes

**pH:** N/A

### SECTION 10 STABILITY AND REACTIVITY:

**Conditions to avoid:** dust generation

**Stability:** Stable at normal room temperature and pressure. May polymerize if heated to the melting point. May polymerize on exposure to light. May form explosive dust –air mixtures.

**Incompatibility:** Metals, oxidizing agents, reducing agents, bases, and acids

**Hazardous Decomposition Products:** Thermal decomposition may produce toxic fumes of carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** may occur see above.

### SECTION 11 TOXICOLOGICAL PROPERTIES

**Exposure Limits:**

LD50 / LC50:

ORL-RAT LD50:124 MG/KG

**Teratogenicity:** see entry for RTECS

**Epidemiology:** confirmed carcinogen in animals

**Reproductive Effects:** have occurred in experimental animals

**Neurotoxicity:** have occurred in humans

**Mutagenicity:** see RTECS

**Carcinogenicity:** Confirmed animal carcinogen ACGIH

NTP: suspected carcinogen

IARC: Group 2A carcinogen

### SECTION 12 ECOLOGICAL INFORMATION

No information found.

### SECTION 13 DISPOSAL CONSIDERATION

**Waste Disposal:** Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

### SECTION 14 TRANSPORT INFORMATION

**Shipping Information:**

DOT (US) UN number: 3077 Class: 9 Packing group: III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Copper sulphate pentahydrate) Reportable Quantity (RQ): 10 lbs • Marine pollutant: yesPoison Inhalation Hazard: No

IMDG UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper sulphate pentahydrate) Marine pollutant : yes

IATA UN number: 3077 Class: 9 Packing group: III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Copper sulphate pentahydrate)

### SECTION 15 REGULATORY INFORMATION

US : TSCA: listed

**European/International:**

**Canada:** WHMIS: D1B, D2A

Listed on DSI list.Controlled product.

Listed on the Canadian Ingredient Disclosure list.

### SECTION 16 ADDITIONAL INFORMATION

**Hazard Rating System**

NFPA	Health	Fire	Reactivity
	2	2	2

Prepared By: M.Kierdelewicz (President)

Date Prepared: Oct 6/2022

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