

**iDrain Copper Sulfate Pentahydrate Crystals**

According to OSHA 29 CFR 1910.1200 and GHS

Issue Date: 01-2026 Revision Date: 01-2026 Version: 01 EN (English US)

SECTION 1: IDENTIFICATION**1.1 Product Identifier**

Field	Information
Product Name	iDrain Copper Sulfate Pentahydrate Crystals
Chemical Name	Copper Sulfate Pentahydrate
Product Form	Industrial Grade - Blue Crystals
CAS Number	7758-99-8

1.2 Other Means of Identification

Field	Information
Synonyms	Copper Sulfate Crystals; Blue Vitriol; Cupric Sulfate; Copper(II) Sulfate Pentahydrate
Chemical Formula	CuSO ₄ .5H ₂ O
Molecular Weight	249.68

1.3 Recommended Use of the Product

Industrial use; laboratory use; general industrial applications.

1.4 Restrictions on Use

Not for food use. Not for cosmetic or personal care use. Not for medical or pharmaceutical use. Not for pesticide applications. This product is not food grade and is not intended for ingestion.

1.5 Name, Address, and Telephone of Responsible Party

HBG Distribution Inc.
709 B W Rusk St
Suite 322
Rockwall, TX 75087
United States
Phone: 972-485-1700
Website: www.idrain-hbg.com



1.6 Emergency Telephone Number

CHEMTREC (24 hours): 1-800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION**2.1 Classification of the Substance**

Hazard Class	Category
Acute Toxicity (Oral)	Category 4
Serious Eye Damage	Category 1
Hazardous to Aquatic Environment - Acute	Category 1
Hazardous to Aquatic Environment - Chronic	Category 1

2.2 Label Elements

 GHS05 Corrosive	 GHS09 Environmental Hazard	Signal Word WARNING Hazard Statements: H302 Harmful if swallowed; H318 Causes serious eye damage; H410 Very toxic to aquatic life with long lasting effects.
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2.3 Hazard Statements

Code	Hazard Statement
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.

2.4 Precautionary Statements

Category	Precautionary Statement
Prevention	P264 Wash thoroughly after handling.
Prevention	P270 Do not eat, drink, or smoke when using this product.
Prevention	P273 Avoid release to the environment.
Prevention	P280 Wear protective gloves, eye protection, and face protection.
Response	P301+P312 IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
Response	P330 Rinse mouth.
Response	P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Response	P310 Immediately call a POISON CENTER or physician.
Response	P391 Collect spillage.
Disposal	P501 Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.5 Hazards Not Otherwise Classified (HNOC)

No additional hazards known under normal conditions of use.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Name	Common Name and Synonyms	CAS Number	Concentration
Copper (II) Sulfate Pentahydrate	Cupric Sulfate Pentahydrate	7758-99-8	>99%

3.2 Mixture

Not applicable.

SECTION 4: FIRST-AID MEASURES

4.1 Description of First-Aid Measures

Route	First-Aid Measures
General	Never give anything by mouth to an unconscious person. If medical advice is needed, have product container, label, or SDS available.
Inhalation	Move person to fresh air. Call a physician if symptoms develop or persist.
Skin Contact	Wash with soap and water. Get medical attention if irritation develops or persists.
Eye Contact	Immediately flush eyes with water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek immediate medical attention.
Ingestion	Rinse mouth. Do not induce vomiting. Seek medical attention if symptoms occur.

4.2 Most Important Symptoms and Effects

Causes serious eye damage. Dust may irritate the respiratory tract and skin. Harmful if swallowed.

4.3 Indication of Immediate Medical Attention and Special Treatment Needed

Provide general supportive measures and treat symptomatically. Keep the victim under observation.

SECTION 5: FIRE-FIGHTING MEASURES

Subsection	Information
5.1 Extinguishing Media	Suitable extinguishing media: Water fog, foam, dry chemical powder, or carbon dioxide (CO ₂). Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.
5.2 Special Hazards Arising from the Substance	Sulfur oxides, carbon oxides, and copper fumes may form during fire. Product is not classified as flammable but may decompose under fire conditions.
5.3 Advice for Firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Prevent contaminated runoff from entering drains or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Subsection	Information
6.1 Personal Precautions, Protective Equipment, and Emergency Procedures	Avoid inhalation of dust. Wear appropriate PPE. Ensure adequate ventilation. Keep unnecessary personnel away.
6.2 Environmental Precautions	Avoid environmental release. Prevent entry into waterways, sewers, drains, soil, or confined areas.
6.3 Methods and Materials for Cleanup	Sweep or vacuum material into suitable labeled containers. Avoid dust generation. Do not return spilled material to the original container.
6.4 Reference to Other Sections	See Section 8 for exposure controls and personal protection. See Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Subsection	Information
7.1 Precautions for Safe Handling	Avoid breathing dust. Avoid contact with eyes. Do not eat, drink, or smoke while handling. Wear appropriate PPE. Wash thoroughly after handling. Avoid release to the environment.
7.2 Conditions for Safe Storage, Including Incompatibilities	Store in a cool, dry, well-ventilated area. Keep container tightly closed when not in use. Store away from strong oxidizers, reducing agents, bases, and incompatible materials.
7.3 Specific End Use(s)	Industrial use, laboratory use, and general applications only. Use only as directed and in accordance with applicable regulations.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control Parameters

Substance	Source	Exposure Limit
Copper Sulfate Pentahydrate	OSHA PEL	1 mg/m ³ Dust/Mist
Copper Sulfate Pentahydrate	ACGIH TLV	1 mg/m ³ Dust/Mist
Copper Sulfate Pentahydrate	NIOSH REL	1 mg/m ³ Dust/Mist

8.2 Exposure Controls

Appropriate engineering controls: Use good general ventilation. Use local exhaust or other engineering controls where dust may be generated. Provide eyewash station.

PPE Type	Recommendation
Eye/Face Protection	Safety goggles and face shield.
Hand Protection	Chemical-resistant gloves.
Skin/Body Protection	Protective clothing as needed.
Respiratory Protection	NIOSH-approved respirator where dust exposure exists or ventilation is inadequate.
Hygiene Measures	Wash thoroughly after handling. Do not eat, drink, or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Physical State	Solid
Form / Appearance	Blue crystals
Odor	Odorless
pH	3.7 - 4.4
Melting Point	302 F (150 C)
Density	2.28 g/cm ³
Solubility in Water	31.6 g/100 cc at 68 F (20 C)
Flammability	Not classified as flammable; may decompose under fire conditions
Molecular Formula	CuSO ₄ .5H ₂ O
Molecular Weight	249.68
Explosive Properties	Not explosive
Oxidizing Properties	Not oxidizing

SECTION 10: STABILITY AND REACTIVITY

Subsection	Information
10.1 Reactivity	Stable and non-reactive under normal conditions of use, storage, and transport.
10.2 Chemical Stability	Stable under recommended conditions. Hygroscopic material.
10.3 Possibility of Hazardous Reactions	No dangerous reactions known under normal use conditions.
10.4 Conditions to Avoid	Moisture, excessive heat, dust generation, and contact with incompatible materials.
10.5 Incompatible Materials	Strong oxidizers, reducing agents, strong bases, aluminum, steel, iron, and other incompatible materials.
10.6 Hazardous Decomposition Products	Sulfur oxides, copper fumes, and carbon oxides may form during fire.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Endpoint	Result
Likely Routes of Exposure	Inhalation, skin contact, eye contact, ingestion
Oral LD50 (rat)	481 mg/kg
Dermal LD50 (rat)	>2000 mg/kg
Skin Irritation	Temporary irritation possible
Serious Eye Damage	Causes serious eye damage
Respiratory Sensitization	Not classified
Skin Sensitization	Not expected to cause skin sensitization
Carcinogenicity	Not classified by OSHA, IARC, or NTP
Reproductive Toxicity	Not expected to cause reproductive or developmental effects
Aspiration Hazard	Not classified

11.2 Symptoms/Injuries After Exposure

Dust may irritate the respiratory tract and skin. Causes serious eye damage. Harmful if swallowed.

SECTION 12: ECOLOGICAL INFORMATION

Subsection	Information
12.1 Toxicity	Very toxic to aquatic life with long lasting effects. Avoid release to the environment.
12.2 Persistence and Degradability	Not relevant for inorganic substances.
12.3 Bioaccumulative Potential	No data available.
12.4 Mobility in Soil	Water soluble and may disperse in soil or water.
12.5 Other Adverse Effects	Avoid environmental release. Do not discharge into drains or waterways.

SECTION 13: DISPOSAL CONSIDERATIONS

Subsection	Information
13.1 Waste Treatment Methods	Dispose of contents/container in accordance with local, regional, national, and international regulations. Dispose through an approved hazardous or special waste facility when required.
13.2 Hazardous Waste Code	Assign according to applicable federal, state, and local regulations in consultation with the waste disposal provider.
13.3 Contaminated Packaging	Empty containers may retain residue. Follow label warnings even after container is emptied. Dispose of containers through approved waste handling or recycling facility.

SECTION 14: TRANSPORT INFORMATION

14.1 DOT (US)

Field	Value
UN Number	UN3077
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (cupric sulfate)
Hazard Class	9
Label Code	9
Packing Group	III
Marine Pollutant	Yes
Special Precautions	Read safety instructions, SDS, and emergency procedures before handling.

14.2 IATA

Field	Value
UN Number	UN3077
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s. (cupric sulfate)
Hazard Class	9
Packing Group	III

14.3 IMDG

Field	Value
UN Number	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (cupric sulfate)
Hazard Class	9
Packing Group	III
Marine Pollutant	Yes
EmS	F-A, S-F

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Regulation	Status
OSHA Hazard Communication Standard	Hazardous chemical under 29 CFR 1910.1200.
Toxic Substances Control Act (TSCA)	Listed on the TSCA inventory; status active.
CERCLA Hazardous Substance List	Copper(II) sulfate pentahydrate is listed.
SARA 311/312	Applicable. Hazard categories include acute toxicity and serious eye damage.
SARA 313	Copper Sulfate Pentahydrate listed.
Clean Water Act (CWA)	Hazardous substance; priority pollutant/toxic pollutant considerations may apply.
Safe Drinking Water Act (SDWA)	Listed.

15.2 US State Regulations

California Proposition 65: This product is not known to contain chemicals listed as carcinogens or reproductive toxins under California Proposition 65.

SECTION 16: OTHER INFORMATION

16.1 Issue and Revision Information

Field	Value
Issue Date	01-2026
Revision Date	01-2026
Version	01

16.2 NFPA Rating

Rating Type	Health	Flammability	Reactivity	Special
NFPA 704	2	0	0	-



16.3 HMIS Rating

Rating Type	Health	Flammability	Physical Hazard	Personal Protection
HMIS III	2	0	0	See Section 8

16.4 Regulatory Compliance Statement

This Safety Data Sheet has been prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200). The classification and hazard information contained herein are consistent with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), as adopted by OSHA.

16.5 Full Text of Hazard Statements

Code	Full Text
H302	Harmful if swallowed
H318	Causes serious eye damage
H410	Very toxic to aquatic life with long lasting effects

16.6 Disclaimer

The information contained herein is based on data available to HBG Distribution Inc. and is believed to be accurate as of the date of preparation. However, no warranty, expressed or implied, is made regarding the accuracy, completeness, or suitability of this information for any particular purpose.

This Safety Data Sheet is provided solely for the purpose of compliance with applicable health, safety, and environmental regulations and does not constitute a specification or guarantee of product properties.

The user is responsible for determining the suitability of this material for its intended use and for ensuring that it is handled, stored, transported, and disposed of in accordance with all applicable federal, state, and local regulations.

HBG Distribution Inc. shall not be liable for any damages resulting from improper handling, storage, transportation, disposal, repackaging, misuse, or environmental release of this product. Appropriate hazard warnings and safe handling procedures must be followed at all times.

This product is intended for industrial, laboratory, and general use only. It is not intended for food, cosmetic, pharmaceutical, medical, or pesticide applications.

16.7 Revision Information

Initial iDrain-branded SDS for Copper Sulfate Pentahydrate Crystals based on supplier safety data, product label review, OSHA Hazard Communication requirements, and product hazard classification alignment.