

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS

DANGER. Corrosive. Causes eye damage and skin irritation. Do not get in eyes, on skin, or on clothing. Wear goggles, face shield, or safety glasses. Harmful if swallowed or inhaled. May cause skin sensitization reactions in certain individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

- i. "This pesticide is toxic to fish. Direct application of copper sulfate to water may cause a significant reduction in populations of aquatic invertebrates, plants and fish."
- ii. "Do not treat more than one-half of lake or pond at one time in order to avoid depletion of oxygen from decaying vegetation. Allow 1 to 2 weeks between treatment for oxygen levels to recover."
- iii. "Trout and other species of fish may be killed at application rates recommended on this label, especially in soft or acid waters. However, fish toxicity generally decreases when the hardness of water increases."
- iv. "Do not contaminate water by cleaning of equipment or disposal of wastes."
- v. "Consult your State Fish and Game Agency before applying this product to public waters. Permits may be required before treating such waters."
- vi. "This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless this product is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA."

ENDANGERED SPECIES RESTRICTIONS

It is a violation of Federal laws to use any pesticide in a manner that results in the death of an endangered species or adverse modification of their habitat.

The use of this product may pose a hazard to certain Federally designated endangered species known to occur in specific areas within the following counties:

STATE	COUNTY
California (Bulretin No.)	
Solano Grass (EPA/ES-85-13)	Solano
Tennessee Blackwater Darter (EPA/ES-85-04)	Lawrence Wayne Hancock
Freshwater Mussel (EPA/ES-85-07)	Claiborne Hawkins Sullivan
Alabama Blackwater Darter (EPA/ES-85-05)	Lauderdale Limestone Madison
VIRGINIA Freshwater Mussel (EPA/ES-85-06)	Grayson Smith Scott Lee Washington

COPPER SULFATE CRYSTALS

ACTIVE INGREDIENT

Copper Sulfate (Pentahydrate) 99%

INERT INGREDIENT 1%

* Metallic Copper Sulfate 100%
(Copper Sulfate Pentahydrate 25%)

KEEP OUT OF REACH OF CHILDREN

DANGER

Statement of Practical Treatment

IF SWALLOWED: Call a Physician immediately!

Drink promptly a large quantity of milk, egg white, gelatin, or if these are not available, large quantities of water. Avoid alcohol.

IF ON SKIN: Flush with water

IF IN EYES: Flush with plenty of water for 15 minutes. Call a Physician.

Note to Physician: Probable mucousal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

SEE SIDE PANEL FOR

ADDITIONAL PRECAUTIONARY STATEMENTS

Manufactured by

IMPERIAL WEST CHEMICAL COMPANY

Antioch, California

EPA Establishment No. 38539-CA-01
EPA Registration No. 38539-1

Net Weight 80 lbs.

LOT No.

Before using this product in the listed counties you must obtain the EPA Bulletin specific to your area. This Bulletin identifies areas within these counties where the use of this pesticide is prohibited, unless specified otherwise. The EPA Bulletin is available from either your County Agricultural Extension Agent, the Endangered Species Specialist in your State Wildlife Agency Headquarters, or the appropriate Regional Office of the U.S. Fish and Wildlife Service. **THIS BULLETIN MUST BE REVIEWED PRIOR TO PESTICIDE USE.**

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

STORAGE - This material undiluted is corrosive to metal and should not be allowed to remain in contact with metal drip apparatus or spray equipment. Rinse spray equipment thoroughly after use.

Pesticide Disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

ALGAE AND ROOT CONTROL USES

For Algae in Lakes, Ponds and Impounded Waters.
For Algae and Pondweed Control in Irrigation Systems.

For Roots Growing in Sewer Pipes.

1. Static or Minimal Flow Situations (Reservoirs, Lakes and Ponds). Accurately determine the number of acre feet of water to be treated. An acre foot of water is equal to one acre of water one foot deep. 326,000 gallons or 2,720,000 pounds of water.

For control of filamentous and planktonic algae, add 2 1/2 to 2 3/4 pounds per acre foot of water. This application rate will result in a copper concentration of .22 p.p.m. in the treated water. Dilute the recommended amount with at least 20 parts of water and apply the mixture as a uniform surface spray. Break up floating algae mats prior to application. The most effective algae control is obtained under calm sunny conditions.

For control of bottom-attached algae (Chara and Nitella), use 4 1/2 to 5 pounds per acre foot of water to be treated. Add the recommended amount of Copper Sulfate - directly or dilute in 4 gallons of water and apply as a uniform surface spray.

2. Flowing Water Situations (Irrigation/Drainable Water Conveyance Systems). Accurately determine the flow rate of water in Cubic Feet per Second (C.F.S.) or Gallons per Minute (Gal./Min.). One C.F.S. equals 450 Gal./Min. Apply 0.04 oz. (or 60 equals 3 1/2 oz./hour) ounces Copper Sulfate per minute per C.F.S. by a gravity feed or similar system and maintain this rate for 45 minutes. This rate will maintain a copper concentration of 1 p.p.m. in the flowing water for 45 minutes.

NOTE: If treated water is to be used as a source of potable water the metallic copper residual must not exceed 1 p.p.m. (4 p.p.m. copper sulfate pentahydrate).

Make the application at a point of turbulence in the canal for good dispersion of the chemical. The distance of control depends upon the density of algae growth. For this reason, the application should be made as soon as the algae starts interfering noticeably with the flow of water.

3. Control of Root Growth in Sewer Pipes (Residential Sewers). Use 2 to 6 pounds of Copper Sulfate in spring and fall. Remove clean-out plug and pour entire quantity of crystals directly into sewer line and flush into the pipe with water. Note: Do not apply in sink or tub drains.

4. Control of Root Growth in Sewer Pipes (Municipal or Commercial) Sewers. Use 2 pounds of granular copper sulfate crystals for each junction or terminal manhole.

Storm Drains. Use 2 pounds of granular crystals per drain per year. Apply during period of light flow. In dry weather introduce a flow with a hose. If storm drains become almost plugged, repeat treatment 3 or 4 times at 2-week intervals.

Sewer Pumps and Force Mains. Place 2 pounds of granular crystals into a cloth bag at the storage well inlet. Repeat as needed.

Areas treated with Copper Sulfate may be used for swimming or fishing immediately after treatment. Water from treated lakes or ponds may be used to irrigate turf, lawns, putting greens and ornamental plants.

Our recommendations for use of this product are based upon tests believed to be reliable. Since aquatic field conditions vary widely, the user must determine the suitability of this product for his particular application.

Federal approval and/or permits should be obtained in states where required.

ADDITIONAL USES

PRESERVATIVE WOOD - Protects against mildew and fungus growth when used in conjunction with other chemicals.

AGRICULTURE - Pesticide. Effective in the control of tadpole shrimp in rice fields.

Fungicide - An ingredient in Bordeaux mixtures to control plant diseases.

Fertilizers - Alleviates copper deficiencies in the soil when added to fertilizers.

Consult our Product Bulletins Nos. 1 thru 4 or your local State or extension office for formulas and instructions.

WARRANTY STATEMENT

Seller's warranty shall be limited to the terms of the label. On acceptance of this product, the buyer assumes any risk to persons or property arising out of the use or handling of product.

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ACCEPTED
with comment
DEC 1986

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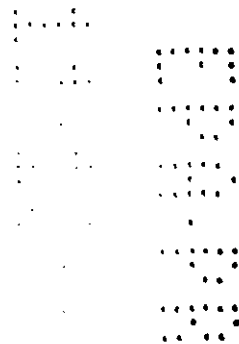
COPPER SULFATE CRYSTALS

PRODUCT BULLETIN #3

1981

FERTILIZER

Copper Sulfate Crystals (from 5 to 10 pounds per 1000 square feet) can be injected in the soil as a solution, or applied dry in holes under deficient trees.





IMPERIAL WEST CHEMICAL CO.

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EPA Registration No. 38539-1

COPPER SULFATE CRYSTALS

PRODUCT BULLETIN #4

1981

WOOD TREATMENT

(For green, peeled posts)

FUNGUS DECAY, ROT

Prepare a solution of 18.0 pounds of sodium chromate in each 26 gallons of water to be used and a separate second solution of 18.0 pounds of Copper Sulfate in each 24 gallons of water to be used; soak the peeled, green posts, butt end down first in the Copper Sulfate solution for 3 days, then butt end down in the sodium chromate solution for 2 days, and finally, turn the posts upside down in the sodium chromate solution for one additional day; remove and rinse posts with clear water.

ACCEPTED

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