WESLEY COPPER SULFATE

POWDER

DIRECTIONS FOR USE

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

RE-ENTRY STATEMENT

Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons. Do not enter treated areas without protective clothing until sprays have dried. Certain states require more restrictive reentry intervals for various crops treated with this product. Consult your State Department of Agriculture for further information.

Written or oral warnings must be given to workers who are expected to be in a treated area or in area about to be treated with this product. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Written and oral warnings must include the following information: DANGER. Area treated with Copper Sulfate on (date of application). Do not enter without appropriate protective clothing until sprays have dried. Required Protective Clothing: long sleeved shirt and long legged pants. In case of accidental exposure wash all exposed skin areas with plenty of soap and water. Because certain states may require restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

STORAGE AND DISPOSAL

Store in a cool, dry place. Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container. If container is damaged, place container in a plastic bag. Shovel any spills into plastic bag and seal with tape. 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 liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities.

GENERAL INSTRUCTIONS

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

When using Copper Sulfate Pentahydrate to control algae there are many factors to consider such as water hardness, temperature of the water, type and quantity of vegetation to be controlled and the amount of water flow. Algae can be controlled more easily and effectively if treatment with Copper Sulfate is made soon after plant growth has started. Under such circumstances, small amounts of Copper Sulfate can effectively control algae in water. However, if treatment is delayed until large amounts of algae are present, larger quantities of Copper Sulfate will be required. Control of algae in water systems is not always permanent. Usually algae is more difficult to control with Copper Sulfate when water temperatures are low. The dose rates for Copper Sulfate are based on a water temperature of 60°F. or higher. Larger quantities of Copper Sulfate will be required in hard water. Normally larger quantities of Copper Sulfate will be required to kill algae in water that is flowing than in a body of stagnant water. If possible, curtail the flow of water before treatment and hold dormant for about three days after treatment or until plants have begun to die. When preparing a Copper Sulfate solution in water, it is best that the mixing vessel be made of plastic or glass. Metal containers lined with plastic or painted or enameled are permissible. Galvanized containers are to be avoided. It is usually best to treat algae on calm sunny days when heavy mats of filamentary algae are most likely to be floating on the surface where it can be sprayed directly. When in doubt about the concentration to be used, it is recommended to start with a lower concentration and gradually increase the concentration until the algae is killed.

CALCULATIONS FOR AMOUNT OF WATER AND COPPER SULFATE PENTAHYDRATE TO BE USED

A. Calculate water volume as follows:
1. Obtain surface area by measuring regular shaped ponds or mapping irregular ponds or by use of previously recorded data or maps.
2. Calculate average depth by sounding in a regular pattern and taking the mean of these readings or by use of previously recorded data.
3. Multiply surface area in square feet by average depth in feet to obtain cubic feet of water volume, or
4. Multiply surface area in acres by average depth in feet to obtain total acre feet of water volume.

B. Calculate weight of water to be treated as follows:
1. Multiply volume in cubic feet by 62.44 to obtain total pounds of water, or
2. Multiply volume in acre feet by 2,720,000 to obtain total pounds of water.

C. Calculate amount of Copper Sulfate Pentahydrate to add.
To calculate the weight of Copper Sulfate Pentahydrate needed to achieve the desired concentration, multiply the weight of water in pounds by the recommended concentration. Since the recommended concentrations are given in parts per million (ppm), first convert the value to a decimal equivalent. A value of 1 ppm is equivalent to 0.000001 as a decimal value. Thus the amount of Copper Sulfate Pentahydrate required to treat 1 acre-foot (2,720,000 pounds) of water with 1 ppm of Copper Sulfate Pentahydrate would be 0.000001 x 2,720,000 = 2.72 lbs Copper Sulfate Pentahydrate.

> Treatment of algae can result in oxygen loss from decomposition of dead algae. This loss can cause fish suffocation. Therefore, to minimize this hazard, treat ⅓ to ½ of the water area in a single operation and wait 7 to 14 days between treatments. Begin treatments along the shore and proceed outwards in bands to allow fish to move into untreated water.
>
> NOTE: If treated water is to be used as a source of potable water, the metallic copper residual must not exceed 1 ppm (4 ppm Copper Sulfate Pentahydrate).

SPECIFIC INSTRUCTIONS

TO CONTROL ALGAE IN IMPOUNDED WATER, LAKES, PONDS, AND RESERVOIRS

There are several methods by which to apply Copper Sulfate to impounded water. Probably the simplest and most satisfactory method is to dissolve the Copper Sulfate crystals in water and to spray this solution over the body of water. A small pump mounted in the boat can easily be used for this purpose. Fine crystals may be broadcast directly on the water surface from a properly equipped boat. [illegible] Copper Sulfate Ag Crystals, Feed Grade or Powder are preferred for this particular method of application. A specially equipped air blower can be used to discharge these fine crystals at a specific rate over the surface of the water. When using this method, the wind direction is an important factor. Do not use this method unless completely familiar with this type of application. Copper Sulfate Ag Crystals and Granular grades are also designed to be used as a dry application from airplanes using a maximum of 5.3 pounds per acre. Where the situation permits, Copper Sulfate may be applied under the water by dragging burlap bags containing Copper Sulfate. The crystals are placed in burlap bags and dragged through the water by means of a boat. Begin treatment along the shoreline and proceed outward until one-third to one-half of the total area has been treated. Care should be taken that the course of the boat is such as to cause even distribution of the chemical. In large lakes it is customary for the boat to travel in parallel lines about 20 to 100 feet apart. Continue dragging the burlap bags over the treated area until the minimum dosage is achieved and all crystals have been dissolved. [illegible] Copper Sulfate Large Crystals or Small Crystals should be used with this method since they dissolve slowly and evenly.

TO CONTROL ALGAE IN RICE FIELDS (Domestic and Wild): Application should be made when algae has formed on the soil surface in the flooded field. Applications are most effective when made prior to the algae's leaving the soil surface and rising to the water surface. Apply 10-15 pounds Copper Sulfate Pentahydrate to the water surface or dissolve in water and make a surface spray. Apply higher rate in deeper water (6 inches or greater).

CONTROL OF TADPOLE SHRIMP IN FLOODED RICE FIELDS (Domestic and Wild): Copper Sulfate Pentahydrate is recommended for the control of Tadpole Shrimp in rice fields. Copper Sulfate should be applied at a rate of 10 to 15 gm. acre by mixing with 50 gals. of water and applying as a uniform surface spray using boat, plane or other professional means and pressurized spray device. This product is also designed to be used as a dry application from airplanes using 10 to 15 pounds per acre. Use at the first indication of infestation after the field has been flooded to a depth of 6 to 8 inches. [illegible] Copper Sulfate Pentahydrate is especially made for maximum solubility in this source of water.

COPPER SULFATE REQUIRED FOR TREATMENT OF DIFFERENT GENERA OF ALGAE

The genera of algae listed below are common, found in waters of the United States. Use the lower recommended rate in soft waters (less than 50 ppm methyl orange alkalinity) and the higher concentration in hard water (above 50 ppm alkalinity). Always consult State Fish and Game Agency before applying this product to municipal waters.

ORGANISM	⅛ to ⅓ ppm*	⅓ to 1 ppm*	1 to 1½ ppm*	1½ to 2 ppm*
Cyanophyceae (Blue Green)	[illegible]	[illegible]	[illegible]	[illegible]
Chlorophyceae (Green)	[illegible]	[illegible]	[illegible]	[illegible]
Diatomaceae (Diatoms)	[illegible]	[illegible]	[illegible]	[illegible]
Protozoa Flagellates	[illegible]	[illegible]	[illegible]	[illegible]

*⅛–⅓ ppm = .67–1.3 lbs/acre ft. ⅓–1 ppm = 1.3–2.6 lbs/acre ft. 1–1½ ppm = 2.6–3.9 lbs/acre ft. 1½–2 ppm = 3.9–5.3 lbs/acre ft.

SEWER TREATMENT—ROOT DESTROYER

A. For Partial Stoppage—Add ½ pound of Copper Sulfate to sewer or drain and flush toward blockage with 5 gallons of water. Repeat at 6 month intervals to prevent growth of new roots.

B. For Complete Stoppage—Physically remove the root blockage and repeat as above.

WOOD TREATMENT

(green, peeled posts)—fungus decay rot

Prepare a solution of 100 pounds of sodium chromate in each 25 gallons of water to be used and a separate second solution of 100 pounds of Copper Sulfate in each 25 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 sodium chromate solution for 2 days, and finally turn the posts upside down in the sodium chromate solution for 1 additional day. Remove and rinse posts with clear water.

BORDEAUX MIXTURE

HOW TO UNDERSTAND BORDEAUX FORMULATIONS:

If the Bordeaux Mixture instructions read 10-10-100, the first figure means the number of pounds of Copper Sulfate Pentahydrate. The second figure means the pounds of hydrated spray lime, and the third figure, the gallons of water to be used. Use as a full coverage spray to runoff.

HOW TO PREPARE A BORDEAUX MIXTURE:

To prepare a Bordeaux Mixture, fill a tank with water one-quarter full. Then with an agitator running, wash Copper Sulfate through a copper, bronze, stainless steel or plastic screen. Add water to the tank to three-quarters full. Mix in the hydrated spray lime through the screen, and finish filling the tank with water.

CROPS

Almonds, Apricots, Peaches, Nectarines: *Shot Hole Fungus* - Prepare a 10-10-100 Bordeaux Mixture and apply as a dormant spray in late fall or early spring.

Almonds, Apricots, Cherries, Peaches, Nectarines, Plums, Prunes: *Brown Rot Blossom Blight* - Prepare a 10-10-100 Bordeaux Mixture and apply when buds begin to swell.

Sour Cherries: *Leaf Spot* - Prepare a 10-10-100 Bordeaux Mixture and apply as a full coverage spray after petal fall or as recommended by the State Extension Service.

Lemons, Oranges, Grapefruit: *Phytophthora Brown Rot* - Prepare a 3-4½-100 Bordeaux Mixture where there is no history of copper injury or a 3-3-6-100 (Zinc Sulfate-Copper Sulfate-Hydrated Lime-Gallons of Water) Bordeaux Mixture. Spray 6 gallons on skirt of tree 3 to 4 feet high and 2 to 4 gallons on trunk and ground under the tree. If Phytophthora is present, use 10 to 25 gallons to completely cover each tree. Apply in November or December just before or after first rain. In severe Brown Rot season, apply second application in January or February.

Lemons, Oranges, Grapefruit: *Septoria Fruit and Leaf Spot (Central California)*; *Brown Rot*; *Zinc and Copper deficiencies* - Prepare a 3-3-6-100 Bordeaux Mixture (Zinc Sulfate-Copper Sulfate-Hydrated Lime-Gallons of Water) and use 10 to 15 gallons to completely cover each tree. Apply in October, November or December just before or after first rain.

Walnuts: *Walnut Blight* - Apply 16 pounds Copper Sulfate with 16 pounds of Hydrated Lime in 100 gallons of water plus ½ gallon summer oil emulsion. Apply in early prebloom 10 to 20% pistillate (nut) when catkin blooms are showing, just before or after rain. Use only if Bordeaux Mixture has been proven to be non-phytotoxic in your area.

Olives: *Peacock Spot, Olive Knot* - Prepare a 10-10-100 Bordeaux Mixture and apply in autumn before heavy winter rains to prevent Peacock Spot. In areas of less than 10 inches rainfall, use a 5-10-100 Bordeaux Mixture. To help protect against Olive Knot apply a 10-10-100 Bordeaux before heavy rains and again in the spring. Injury may occur in areas of less than 10 inches of rainfall.

Lilies: *Botrytis Blight* - Prepare a 10-10-100 Bordeaux Mixture and apply at beginning of emergence. Repeat at 7 to 10 day intervals. Apply more often during frequent rainfalls or when severe disease conditions occur.

FEED ADDITIVE

Copper Sulfate is a valuable dietary supplement in mixed feeds for cattle, hogs, chickens and other agricultural animals. Please consult your State Agricultural Experiment Station or State Extension Service for guidance in preparing dosages and formulas.

— WARRANTY —
CONDITION OF SALE:

DIRECTIONS FOR USE of this product are based on field use and tests believed reliable and should be followed carefully. It is, however, impossible to eliminate all risks associated with use of this product. Because such factors as weather conditions, foreign material and manner of use for application are all beyond the control of Wesley Industries, Inc., or the Seller of this product, such things as crop injury, ineffectiveness or other unintended consequences may result.

ALL SUCH RISKS ARE ASSUMED BY THE BUYER.

Wesley Industries, Inc., warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the directions for use. Wesley Industries, Inc. make no other warranties, expressed or implied, including FITNESS OR MERCHANTABILITY. In no case shall Wesley Industries, Inc., or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. The foregoing is a condition of sale by Wesley Industries, Inc., and is accepted as such by the Buyer.

BEST AVAILABLE COPY

PM23 47916-57 1OF4

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (TS-767)
WASHINGTON, DC 20460

NOTICE OF PESTICIDE: ☒ REGISTRATION ☐ REREGISTRATION

(Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)

EPA REGISTRATION NO.	47916-57
DATE OF ISSUANCE	FEB 3 1989
TERM OF ISSUANCE	Conditional
NAME OF PESTICIDE PRODUCT	Wesley Copper Sulfate Medium Crystals

NAME AND ADDRESS OF REGISTRANT *(Include ZIP code)*

[illegible], Inc.
[illegible]

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

[illegible] conditionally registered in accordance with FIFRA sect[illegible] that you:

[illegible] registration/reregistration of your [illegible] FIFRA section 3(c)([illegible] the Agency requires all registrants of similar products to submit such data.

[illegible] the labeling changes listed below before you release the product for shipment:

a. Add the phrase "EPA Registration No. 47916-57."

b. The label must be revised by adding the statement "May cause skin sensitization in certain individuals" to the precautionary statements section prior to the release of this product into the channels of trade.

[illegible] of your final printed labeling before you re[illegible] for shipment. Refer to the A-79 enclosure for a further d[illegible] printed labeling.

☐ ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL	DATE

EPA Form 8570-6 (Rev. 5-76) PREVIOUS EDITION MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

88469:I:Wilson:MF-3:KEMCO:2/1/89:2/10/89:rw:EK:AS

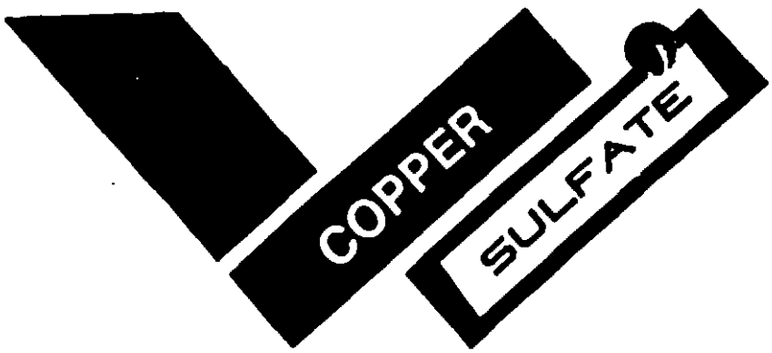
20FK

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Richard F. Mountfort RFM
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (TS-767C)

Enclosures



ACCEPTED
with COMMENTS
In EPA Letter Dated:

FEB 3 1989

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended for the pesticide registered under EPA Reg. No. 47916-57

MEDIUM CRYSTALS

ACTIVE INGREDIENT:	
Copper Sulfate Pentahydrate	99.0%
INERT INGREDIENTS	1.0%
TOTAL	**100.0%**
(METALLIC COPPER EQUIVALENT	25.2%)

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

PRECAUCION AL USUARIO: Si usted noio lee ingles, no use este producto hasta que le etiqueta haya sido explicado ampliamente.

Statement of Practical Treatment

IF SWALLOWED: Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, large quantities of water. Avoid alcohol.
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

IF IN EYES: Flush with plenty of water. Get medical attention.

IF ON SKIN: Remove contaminated clothing. Wash skin with soap and warm water. Get medical attention.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

EPA Reg. No. 47916- EPA Est. No. 47916-AL-01

NET CONTENTS:

wesley industries, inc.

P. O. BOX 493, MONTROSE, ALABAMA 36559 U.S.A.

PRECAUTIONARY STATE

HAZARDS TO HUMANS AND DOMI

DANGER - PEL

Corrosive, causes irreversible eye dam
on skin, or on clothing. Protective c
and rubber gloves, should be worn. Ma
inhaled, or absorbed through the skin.
Causes severe skin irritation. Wash t
water after handling. Remove contamin
before reuse.

ENVIRONMENTAL HAZA

This product is toxic to fish and aqua
apply directly to water except as dire
instructions section. Drift and runof
may be hazardous to fish and aquatic o
aquatic sites. Direct application of
may cause a significant reduction in p
invertebrates, plants and fish. Do no
of lake or pond at one time in order t
oxygen levels due to decaying vegetati
weeks between treatments for oxygen le

Trout and other species of fish may be
rates recommended on this label, espec
waters. However, fish toxicity generi
hardness of water increases.

Do not contaminate water by cleaning e
of wastes. Consult your State Fish an
applying this product to public waters
required before treating such waters.