

48222-7

3/8/2013

1/10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Bradley Hayes
Spring Trading Company
10805 W. Timberwagon Circle
Spring, TX 77380-4030

MAR 8 2013

Subject: Agro-K Copper Lite
EPA Reg. No. 48222-7
Amendment dated 2/8/2013 to prohibit use on certain crops in California
EPA Decision No. 475499

Dear Mr. Hayes,

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended, to list the use of beans, peanuts, potatoes, soybeans, and sugar beets as exceptions for the state of California, is acceptable. A copy of the label, stamped "Accepted", is enclosed for your review.

If you have any questions, please contact Kaitlin Keller by phone at (703)-308-8172 or via email at keller.kaitlin@epa.gov.

Sincerely,

A handwritten signature in black ink that reads "Tony Kish".

Tony Kish
Product Manager 22
Fungicide Branch
Registration Division (7504P)

Enclosure: Label stamped "Accepted"

Agro-K Copper Lite

Algaecide/Fungicide

ACTIVE INGREDIENTS: (BY WT.)

Copper Sulfate Pentahydrate 15.72%

OTHER INGREDIENTS: 84.28%

TOTAL 100.00%

Copper (Cu) as metallic 4%

One gallon contains 0.42 lbs. of elemental copper and 0.42 lbs. of elemental zinc.

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

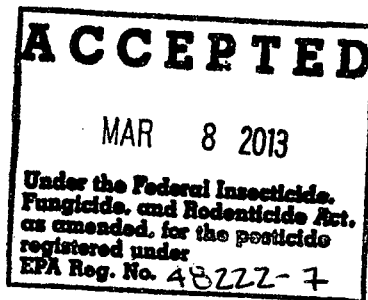
FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"> ■ Hold eyelid open and rinse slowly and gently with water for 15-20 minutes. ■ Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. ■ Call a poison control center or doctor immediately for treatment advice.
IF ON SKIN:	<ul style="list-style-type: none"> ■ Take off contaminated clothing. ■ Rinse skin immediately with plenty of water for 15-20 minutes. ■ Call a poison control center or doctor immediately for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none"> ■ Call a poison control center or doctor immediately for treatment advice. ■ Do not induce vomiting unless told to do so by a poison control center or doctor. ■ Have a person sip a glass of water if able to swallow. ■ Do not give anything to an unconscious or convulsing person.
IF INHALED:	<ul style="list-style-type: none"> ■ Move person to fresh air. ■ If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. ■ Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER Have the product container or label with you when calling a poison control center or doctor or going for treatment. In case of emergency, call ChemTrec at 1-800-424-9300.	
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage	

Net Contents: ___ Gallons

EPA Reg. No.:48222-7

MANUFACTURED BY Agro-K Corporation 8030 Main Street N.E. Minneapolis, MN 55432

EPA Est. No.:



PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through the skin. Do not get in eyes, on skin or on clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear (goggles face shield, or shielded safety glasses)

USER SAFETY REQUIREMENTS

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements maybe reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS Users

should:

- Wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. As soon possible, wash thoroughly and change into clean clothing. Wash the outside of gloves before removing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates and may contaminate water through runoff. This product has a potential for runoff for several months or more after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters or rinsate.

Drift and runoff may be hazardous to aquatic organisms in waters adjacent to treated areas.

Waters treated with this product may be hazardous to aquatic organisms. Treatment of aquatic weeds and algae can result in oxygen loss from decomposition of dead algae and weeds. This oxygen loss can cause fish and invertebrate suffocation. To minimize this hazard, do not treat more than 1/3 of the water body to avoid depletion of oxygen due to decaying vegetation. Wait at least 10 to 14 days between treatments. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Consult with the State or local agency with primary responsibility for regulating pesticides before applying to public waters, to determine if a permit is required.

Trout and other species of fish may be killed at application rates recommended on this label. Certain water conditions including low pH (≤ 6.5), low dissolved organic carbon (DOC) levels (3.0 mg/L or lower), and "soft" waters (i.e., alkalinity less than 50 mg/L), increases the potential acute toxicity to non-target aquatic organisms.

Potable water sources treated with copper products may be used as drinking water only after proper additional potable water treatments."

PHYSICAL OR CHEMICAL HAZARDS

Do not use, pour, spill or store near heat or open flame.

CHEMIGATION PROHIBITION

Do not apply this product through any type of irrigation system.

DIRECTIONS FOR USE

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

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear (goggles face shield, or shielded safety glasses)

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

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.

PESTICIDE STORAGE:

Store in a cool, dry place in the original container. Do not store in a manner where cross contamination with other pesticides, fertilizers, food or feed could occur.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Then offer for recycling if available, or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. If rinsate cannot be used, follow pesticide disposal instructions. If not triple rinsed, these containers are acute hazardous wastes and must be disposed in accordance with local, state and federal regulations. DO NOT cut or weld metal containers.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times."

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times

Agro-K Copper Lite can be used to control Algae in impounded waters, lakes, ponds and reservoirs, for algae control in potable water or irrigation conveyance systems and for fungicidal control of specific diseases on crops.

GENERAL DIRECTIONS

This liquid copper sulfate product is easy and ready to use to control algae in potable or irrigation water including reservoirs, ponds, lakes, irrigation or potable water conveyance systems.

For Potable Water Systems, the amount of Copper Sulfate Pentahydrate applied should not exceed 4 ppm, which is an equivalent copper concentration of 1 ppm in the treated water.

Agro-K Copper Lite effectively controls many species of both filamentous (mat forming green algae) and planktonic (single cell blue-green) algae. The rate of copper sulfate and control are affected by algae species, water hardness, water temperature, amount of algae present, as well as whether water is clear, turbid, flowing, or static. Preferably water should be clear and above 60 DEGREES F, with treatment made in the late morning on a sunny day. Static water usually requires less copper sulfate than flowing water. The harder the water, the higher the required rate of copper sulfate. When mats of filamentous algae are floating, the surface of these mats should be sprayed. Algae will absorb the copper sulfate within hours after treatment, and death should be evident within 3 to 5 days. If there is some doubt about the concentration to apply, it is generally best to begin with a lower rate and increase the rate until the algae are killed. (A few algae species are resistant to copper sulfate treatment and may not be killed.) Repeat treatments may be needed to keep algae under control to the desired levels.

Treatment of algae can result in oxygen loss from the water caused by the decay of dead algae. This loss can cause fish suffocation. To minimize this hazard, treat 1/3 to 1/2 of the water area in a single operation and wait 10 to 14 days between treatments. Begin treatments along the shore and proceed outwards in bands to allow fish to move into untreated water. Trout and other species of fish may be killed at application rates recommended on this label, especially in soft and acid waters.

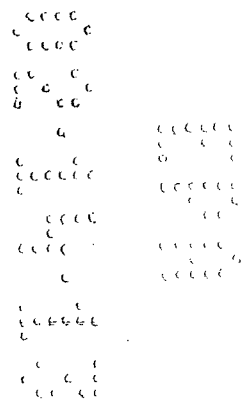
1. For Algae Control in Reservoirs, Lakes, Ponds, Impounded Waters:

When to apply: Early treatment is essential for most satisfactory algae control at the lowest rate levels. Early growth is usually confined to shallower shore areas. Begin treatment when not over 5 to 10% of the water surface area is covered with algae growths which is usually nearest the shoreline. Delaying treatment until heavy algae growths are present usually requires a higher rate and may result in fish distress or death since rapid decomposition of heavy growths greatly reduces the oxygen content of the water. Several repeat treatments are necessary to control algae each season.

Rates to Control Algae: First, accurately determine the surface acres of water to be treated at one time and multiply this by the average depth in feet of this water area to determine the acre feet of water to be treated. [One acre foot - one surface acre (43,560 sq. ft.) x one foot depth.] Each acre foot of water contains 326,000 gallons, or 2,720,000 pounds of water. Since recommended concentrations are normally given in parts per million (ppm), it will first be necessary to convert the value in parts per million to a decimal equivalent. For example, 2 ppm is the same as 0.000002 when used in this calculation. Therefore, to calculate the amount of Copper Sulfate Pentahydrate (CSP) to treat 1 acre-foot of water with 2 ppm Copper Sulfate, the calculation would be as follows:

$$0.000002 \times 2,720,000 = 5.44 \text{ lbs. Copper Sulfate Pentahydrate.}$$

To obtain the correct amount of Agro-K Copper Lite divide 5.44 lbs. CSP. by 1.650 lbs. CSP/gallon Copper Lite. lbs. which equals 3.3 gallons of Agro-K Copper Lite. The rates of Agro-K Copper Lite per acre foot of water to control specific algae species are given later in the label. Secondly, if the problem algae genus is known, use the table below and its equivalents to determine the approximate rate of this product needed to control that genus. If the genus of either filamentous or planktonic algae is not known, apply 6.6-9.9 quarts of this product per acre foot of water, using the lower rate in soft water and the higher rate to hard water. For control of bottom-attached algae Chara and Nietella use 9.9-13.2 quarts per acre foot of water to be treated. If control is not achieved or in very adverse waters, a higher rate may be needed, but consider the fish species.



COPPER SULFATE REQUIRED FOR TREATMENT OF DIFFERENT GENERA OF ALGAE

The genera of algae listed below are commonly 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 in municipal water.

COPPER LITE APPLICATION RATES AND PPM EQUIVALENTS OF COPPER SULFATE PENTAHYDRATE PER ACRE FOOT OF WATER

ORGANISM	1.6 - 3.3 qt. ¼ to ½ ppm*	3.3 - 6.6 qt. ½ to 1 ppm*	6.6 - 9.9 qt. 1 to 1 ½ ppm*	9.9-13.2 qt. 1 ½ to 2 ppm*
<i>Cyanophyceae</i> (Blue-green)	Anabaena	Cylindrospermum	Nostoc	Calothrix
	Anacystis	Oscillatoris	Phormidium	Symploca
	Aphanizomenon	Plectonema		
	Gloeotrichia			
	Gomphosphaeria			
	Polycystis			
	Rivularia			
<i>Chlorophyceae</i> (Green)	Closterium	Botryococcus	Chlorella	Ankistrodesmus
	Hydrodictyon	Cladophora	Crucigenia	Chara
	Spirogyra	Coelastrum	Desmidium	Nitella
	Ulothrix	Drapamaldia	Golenkinia	Scenedesmus
		Enteromorpha	Oocystis	
		Gloeocystis	Palmella	
		Microspora	P'rhophora	
<i>Diatomaceae</i> (Diatoms)	Asierionella	Tribonema	Staurastrum	
	Fragilaria	Zygnema	Tetraedron	
	Melosira	Gomphonema	Achnanthes	
	Navicula	Nitzschia	Cymbella	
		Stephanodiscus	Neidium	
<i>Protozoa</i> (Flagellates)	Dinobryon	Synedra Tabellaria	Chlamydomonas	Eudorina
	Synura	Ceratium	Hawmatococcus	Pandorina
	Uroglena	Cryptomonas	Peridinium	
	Volvox	Euglena		
		Glenodinium		
	Mallomonas			

*ppm copper sulfate pentahydrate; metallic copper equivalent can be obtain by multiplying CSP value by 0.254

How to apply **Agro-K Copper Lite**: Dilute the recommended amount of this product in sufficient water to thoroughly and uniformly spray the water surface including any floating algae mats.

2. Algae Control in irrigation and Potable Water Conveyance Systems: Accurately determine the water flow rate in Cubic Feet per Second (C.F.S.) or gallons per minute (Gal/Min). One CFS equals 450 Gal/Min. The calculation of water flow in ditches, streams and irrigation device can be found by means of either the Continuous or Slug application method. Copper sulfate becomes less effective as the bio-carbonate alkalinity increases and is significantly reduced when the bio-carbonate alkalinity exceeds about 150 ppm as CaCO₃ regardless if applied by either of the following methods.

3. Algae Control in Rice Fields: Apply 1.65 to 2.5 gallons **Agro-K Copper Lite** liquid per acre foot water to the water surface as a surface spray (application rate not to exceed 0.40 ppm copper metal equivalent based on acre-feet of water in field). Application should be made when the algae has formed on the soil surface but prior to rising of the water surface.

4. Tadpole Shrimp Control in Rice Fields: Apply 3.3 to 6.3 gallons of **Agro-K Copper Lite** liquid per acre-foot of water to the flooded field at any time the pest appears between planting time and until the seedlings are rooted and have emerged through the water surface. The application rate not to exceed 2.5 ppm copper metal equivalent based on acre-feet of water in field. The lower rate should be used when the water depth and flow rate are minimal and higher rate should be used when the water depth and flow are at a maximum.

FOR FUNGICIDE USE

Use as directed below. Depending on the equipment used and the specific crop, the volume applied per acre will differ. For high volume sprays use from 25 to 100 gallons per acre (GPA). For concentrate ground sprays, apply from 20 to 50 GPA. For aerial spraying, 3 to 15 GPA are commonly used.

SPECIFIC INSTRUCTIONS

BEANS (except for California): Bacterial Blight (Halo & Common). Use 31 to 72 fl. oz. per acre. Make first application when plants are 3 to 5 inches high before disease symptoms appear. Continue application on a 7-10 day schedule, depending on local conditions.

Do not apply more than 72 fl. oz./A per application and do not apply more than 11.3 gallons (1445 fl. oz.) product per year.

CANTALOUPE: HONEYDEWS, MUSKMELON, WATERMELON, Downy Mildew, Powder Mildew, Alternaria & Angular Leaf Spot, Scar. Apply at 31 to 72 fl. oz. per acre when plants begin to vine. Continue applications on a weekly basis. In areas where Angular Leaf Spot is a problem, applications should be made on a 5-7 day schedule.

Do not apply more than 72 fl. oz./A per application and do not apply more than 12.5 gallons (1600 fl. oz.) product per year.

CELERY: Early, Late & Bacterial Blight. Apply 31 to 72 fl. oz. per acre. Begin applications when plants are first established, then every 7 days, depending on disease conditions.

Do not apply more than 72 fl. oz./A per application and do not apply more than 12.6 gallons (1615 fl. oz.) product per year.

CUCUMBERS: Alternaria & Angular Leaf Spot, Powdery Mildew. Apply at 31 to 72 fl. oz. per acre when plants begin to vine. Continue applications on a weekly basis. In areas where Angular Leaf Spot is a problem, applications should be made on a 5-7 day schedule.

Do not apply more than 72 fl. oz./A per application and do not apply more than 12.5 gallons (1600 fl. oz.) product per year.

PEANUTS (except for California): Cercospora Leaf Spot. Begin spraying at 31 to 72 fl. oz. per acre at first sign of disease and every 10-14 days thereafter.

Do not apply more than 72 fl. oz./A per application and do not apply more than 11.3 gallons (1445 fl. oz.) product per year.

POTATOES (except for California): Early and Late Blight. Apply at 31 to 72 fl. oz. per acre. Begin applications when plants are 3-4 inches high and continue at 7-10 day intervals.

9/10

Do not apply more than 72 fl. oz./A per application and do not apply more than 59.5 gallons (7619 fl. oz.) product per year.

SOYBEANS (except for California): Bacterial Blight (Halo & Common). Use 45 to 58 fl. oz. per acre. Make first application when plants are 3-5 inches high before disease symptoms appear. Continue applications on a 7-10 day schedule, depending on local conditions.

Do not apply more than 58 fl. oz./A per application and do not apply more than 11.3 gallons (1445 fl. oz.) product per year.

SQUASH: (summer & winter), Alternaria & Angular Leaf Spot, Powdery Mildew. Use 31 to 72 fl. oz. per acre when plants begin to vine. Continue applications on a weekly basis. In areas where Angular Leaf Spot is a problem, applications should be made on a 5-7 day schedule.

Do not apply more than 72 fl. oz./A per application and do not apply more than 12.5 gallons (1600 fl. oz.) product per year.

SUGAR BEETS (except for California): Cercospora Leaf Spot. Use 31 to 72 fl. oz. per acre. Begin when plants are 3-4 inches high and continue on a 10-14 day interval or more frequently if disease conditions are severe.

Do not apply more than 72 fl. oz./A per application and do not apply more than 18.7 gallons (2395 fl. oz.) product per year.

TOMATO: Bacterial Spot, Early Blight. Use 31 to 72 fl. oz. per acre. In seedbeds, begin application when seedlings emerge and repeat at 4-5 day intervals. In field, begin applications immediately after transplanting and continue on 7 day intervals or more frequently if disease conditions are severe.

Do not apply more than 72 fl. oz./A per application and do not apply more than 41.4 gallons (5303 fl. oz.) product per year.

PEPPERS: Bacterial Spot, Cercospora Leaf Spot. Apply at 31 to 72 fl. oz. per acre. Begin application before disease appears and continue at 7-10 day intervals.

Do not apply more than 72 fl. oz./A per application and do not apply more than 28.2 gallons (3611 fl. oz.) product per year.

CONDITIONS OF SALE—LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES
Read the Conditions of Sale—Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Agro-K, Inc. or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Agro-K, Inc. and Seller harmless for any claims relating to such factors.

Agro-K, Inc. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Agro-K, Inc. and Buyer and User assume the

