

**4** AQUATROLS  
**Radiance**™  
 Algicide For Lakes and Ponds

**ACTIVE INGREDIENTS**

Copper Sulfate Pentahydrate\* (CAS No. 7758-99-8) .....19.8%\*

**INERT INGREDIENTS** ..... 80.2%

**Total** ..... 100.0%

\*Metallic Copper Equivalent Equal ..... 5%

THIS PRODUCT WEIGHS 9.9 LB. PER GALLON

EPA Reg. No. 64962-1-83940

EPA Est. No. 64962-NE-001

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

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

**FIRST AID**

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN**

**OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of soap and water for 15-20 minutes. Call a poison control center or doctor for treatment.

**IF IN EYES:**

Hold eye open and rinse slowly and gently with water for 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for advice.

**NOTE TO**

**PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SEE ADDITIONAL PRECAUTIONARY STATEMENTS

**Distributed By:**



1273 Imperial Way  
 Paulsboro, NJ 08066 USA  
 Phone: 856-537-6003  
 Fax: 856-537-6018  
 www.aquatrols.com

**NET CONTENTS:**

■ **ONE U.S. GALLON**



**DO NOT FREEZE**



Department of Agriculture  
 STATE OF HAWAII

**LICENSED**

PERIOD **2014-2016** LIC. NO.

**9850.8**



Department of Agriculture  
 STATE OF HAWAII

**LICENSED**

PERIOD **2011-2013** LIC. NO.



Department of Agriculture  
 STATE OF HAWAII

**LICENSED**

PERIOD **2008-2010** LIC. NO.

**PRECAUTIONARY STATEMENTS**  
 Hazards to Humans and Domestic Animals

**DANGER**

Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Avoid contact with skin. Wear protective eyewear (goggles, face shield or safety glasses). Harmful if swallowed, inhaled or absorbed through skin. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

**ENVIRONMENTAL HAZARDS**

**Fish and Aquatic Organisms:** This product is toxic to fish. Direct application of copper sulfate to water may cause a significant reduction in populations of aquatic invertebrates, plants and fish. Do not treat more than one-half of a lake or pond at one time to avoid depletion of oxygen from decaying vegetation. Allow 1 to 2 weeks between treatment for oxygen levels to recover. Trout and other species of fish may be killed at application rates recommended on this label, especially in soft or acidic waters. Do not contaminate water when disposing of equipment wash waters. (See Disposal Instructions). Consult your local State Fish and Game Agency before applying this product to public waters. Permits may be required before treating such waters.

**Endangered Species Restrictions:** It is a violation of federal law 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	Species	Bulletin No.	County
California	Solano Grass	EPA/ES-85-13	Solano
Tennessee	Slackwater Darter	EPA/ES-85-04	Lawrence
	Freshwater Mussels	EPA/ES-85-07	Wayne
			Hancock
			Claiborne
			Hawkins
			Sullivan
Alabama	Slackwater Darter	EPA/ES-85-05	Lauderdale
			Limestone
			Madison
Virginia	Freshwater Mussels	EPA/ES-85-06	Grayson
			Smyth
			Scott
			Washington
			Lee

**PLEASE NOTE** before using this product in the above 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.**  
 For Chemical Emergency Call INFOTRAC 1-800-535-5053  
 Non-Flammable. Do Not Freeze.

**PERSONAL PROTECTIVE EQUIPMENT**

Applicators and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Chemical resistant gloves made of any water proof material Chemical Resistant Category A
- Protective eyewear
- Shoes plus socks

Maintain this clothing separately from other laundry and wash

with detergent and hot water, or according to manufacturer's label. If these items become drenched with this product's concentrate, discard the clothing and do not reuse.

**DIRECTIONS FOR USE**

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

**GENERAL INFORMATION**

RADIANCE™ is an innovative, unique formulation used to control algae in irrigation reservoirs, ponds, lakes and irrigation conveyance systems.

**APPLICATION AND HANDLING EQUIPMENT**

Application, handling or storage equipment MUST consist of either fiberglass, PVC, polypropylene, viton, most plastics, or stainless steel. Never use mild steel, nylon, aluminum, brass or copper around full strength RADIANCE™. Always rinse equipment free and clean of RADIANCE™ each night with plenty of fresh, clean water.

Always store RADIANCE™ above 32 degrees F. Freezing may cause product separation. Seller makes no warranty for product which has been frozen. Use formula for calculating water volume and flow rates. To find the capacity of water storage containment in gallons, multiply the water volume in cubic feet times 7.5.

NOTE: 1 cfs/hr = 27,000 gallons; 1 acre foot = 326,000 gallons

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a safe place away from pets and keep out of the reach of children. Store away from excessive heat. RADIANCE™ will freeze. Always keep container closed. Store RADIANCE™ in its original container only. Keep away from galvanized pipe and any nylon storage handling equipment.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess RADIANCE™, 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.

In the event of spill, neutralize with limestone or baking soda before disposal. May deteriorate concrete.

**CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. 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.

**GENERAL ALGAE CONTROL**

For algae control, apply in the late spring or early summer when algae first appear. The dosages are variable and depend upon algae species, water hardness, water temperature, amount of algae present, as well as whether water is clear, turbid, flowing or static. Preferably, the water should be clear with temperature above 60 degrees F (15.6 degrees C). Higher dosages are required at lower water temperatures, higher algae concentrations and for hard waters. Application should be done by pouring RADIANCE™ directly from the container into the lakes, ponds, reservoirs or irrigation canals.

Several application points speed up dispersal. Static water requires less chemical for algae control than does flowing water. Use higher dosages for chara, nitella and filamentous algae (pond scum) and lower dosages for planktonic algae. If there is uncertainty about the dosage begin with a lower dosage and increase until control is achieved or until the maximum allowable level has been reached.

Treatment of algae can result in oxygen loss from the decomposition of dead algae. This loss can cause fish suffocation. If the algae cover more than one-third of the total water area, treat in sections. Treat one-half of the water area in a single operation and wait for 10 to 14 days between treatments. Begin treatment along the shore and proceed outward in bands to allow fish to move into untreated areas. In regions where ponds freeze in winter, treatment should be done 6 to 8 weeks before expected freeze to prevent masses of decaying algae under an ice cover.

Trout and certain other species of fish may be killed at recommended application rates, especially in soft or acidic waters. Before treating bodies of water, consult proper state authorities such as the Fisheries Commission or Conservation Department to obtain any necessary permits.

**SPECIFIC DIRECTIONS FOR USE**

**To Control Algae in Irrigation Conveyance Systems:** For continuous addition, add one pint RADIANCE™ for each 7,500 - 300,000 gallons. For conveyance systems longer than 30 miles, it is recommended that the above dosage be dispersed among the injection points every 30 miles. However, do not exceed the dose of one gallon in 60,000 gallons.

**To Control Algae in Impounded Waters, Lakes, Ponds, Livestock Watering Systems and Reservoirs:** For easiest results disperse RADIANCE™ evenly throughout the body of water. Apply at the rate of one pint RADIANCE™ in 7,500 - 300,000 gallons. For best results apply to warm still water on a sunny day when algae are near the surface. For potable and livestock watering systems, do not exceed one gallon in 60,000 gallons under any circumstances (1 ppm metallic copper).

Do not apply copper sulfate to water less than 40 ppm alkalinity without first doing a preliminary toxicity test on fish in the water in a separate container. Copper sulfate may be very toxic to trout and other species in soft or acid waters so preliminary testing is necessary.

**LIMITED WARRANTY AND LIMITATION OF REMEDIES**

Seller warrants that the product conforms to the chemical description and is reasonably fit for the purpose stated on the label for use under normal conditions, but makes no other warranties of FITNESS OR MERCHANTABILITY expressed or implied, or any other warranty if the product is used contrary to the label instructions, or under abnormal conditions or under conditions not foreseeable to the seller. In no case shall the seller be liable for more than the cost of this product to the buyer and will in no event be liable for any consequential, special or indirect damages connected with the use or handling of this product. This product is offered and the buyer or user accepts it subject to the foregoing terms which may not be varied.

**Manufactured By:**

Earth Science Laboratories, Inc.  
 113 SE 22nd Street, Suite 1  
 Bentonville, AR 72712  
 Phone: 800-257-9283  
 1005