



EARTHTEC®

ALGICIDE/BACTERICIDE

FOR LAKES, PONDS, RESERVOIRS, CANALS, LAGOONS AND SIMILAR WATER SYSTEMS



ACTIVE INGREDIENTS:		
Copper Sulfate Pentahydrate*	19.8%*	
Inert Ingredients	80.2%	
Total	100.0%	
*Metallic Copper Equivalent Equal		
	5%	

THIS PRODUCT WEIGHS 9.9 LB. PER GALLON

EPA REGISTRATION NO.	64962-1
EPA ESTABLISHMENT NO.	64962-NB-001

NET CONTENTS:
275 GAL. / 1040.99 L

9.9 lb. per gallon / 1.188 kg/L

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

LOT NUMBER

KEEP OUT OF REACH OF CHILDREN
DANGER • PELIGRO

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

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 a time to avoid depletion of oxygen from decaying vegetation. Allow 1 to 2 weeks between treatments 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 Wayne Hancock
	Freshwater Mussels	EPA/ES-85-07	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 waterproof material: Chemical Resistance 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.

GENERAL INFORMATION

EARTHTEC® is an innovative, unique formulation used for the suppression of bacteria and toxic gases in sewage lagoons, feedlot run-off pits, animal confinement facilities and other ponds containing organic matter or algae/bacteria. EARTHTEC® may be used to control algae and suppress bacterial growth in irrigation, reservoirs, ponds, aquacultural ponds, lagoons and potable water supplies. EARTHTEC® inhibits or suppresses the growth of bacteria. When used as directed on this label, it is a bactericide.

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 EARTHTEC®. Always rinse equipment free and clean of EARTHTEC® each night with plenty of fresh, clean water.

Always store EARTHTEC® above 32° F. Freezing may cause product separation. Seller makes no warranty for the performance of product which has been frozen. Apply over entire area of lagoon or mix thoroughly until completely dispersed with sewage. Use formulas 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

GENERAL BACTERIA CONTROL

Application rates may vary depending on amounts of organic matter (sewage) in lagoons and pits. Application should be done by pouring EARTHTEC® directly from the container into the pit or lagoon. Several application points speed up dispersal. Use one gallon of full strength EARTHTEC® in 60,000 gallons (8,000 cubic feet) of sewage. Bacteria and odors should be noticeably reduced in 1 to 2 weeks. Repeat application when odor reoccurs.

Feedlot Run-Off Lagoons: Add a portion of the required dosage of EARTHTEC® at several locations around the lagoon to speed dispersal of the product. A minimum of two applications per year (spring and fall) is recommended. Additional applications may be required as needed when the lagoon is pumped.

Animal Confinement Pits: If pits are located under the confinement buildings, add EARTHTEC® directly to these pits. If the pits are outside, add EARTHTEC® to the transfer line to the pit.

Other Organic Sludges: EARTHTEC® must be thoroughly mixed with sludge. Apply at the rate of one gallon EARTHTEC® in 30,000 gallons of sludge.

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° F (15.6° C). Higher dosages are required at lower water temperatures, higher algae concentrations and for hard waters. Application should be done by pouring EARTHTEC® 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.

DIRECTIONS FOR USE

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

SPECIFIC DIRECTIONS FOR USE

To Control Algae in Irrigation Conveyance Systems, Impounded Waters, Lakes, Ponds, Lagoons and Reservoirs: For best results disperse EARTHTEC® evenly throughout the body of water on a sunny day when algae are near the surface. For fish-bearing lakes, ponds, drinking water reservoirs, irrigation canals and other applications, apply at the rate of one quart of EARTHTEC® per 250,000 gallons of water, or one gallon of EARTHTEC® per 1,000,000 gallons of water. This will yield a rate of 0.06 ppm metallic copper. For applications without fish or for wastewater lagoons apply at the rate of one quart of EARTHTEC® per 15,000 gallons of water, or one gallon of EARTHTEC® per 60,000 gallons of water. This will yield a rate of 1.0 ppm metallic copper. For potable water, do not exceed one gallon of EARTHTEC® per 60,000 gallons of water under any circumstances.

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 or other species in soft or acidic water so preliminary testing is necessary.

SPECIFIC DIRECTIONS FOR AERIAL SPRAYING

EARTHTEC® may be applied by aerial spraying from an airplane or a helicopter or directly into the body of water. The applicator must use measures necessary to control drift. To the extent practicable, minimize the spray drifting from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, nontarget crops, aquatic and wetland areas, woodlands, pastures, rangelands or animals and avoid sensitive environmental areas. Any state requirements applicable to aerial application of pesticides such as EARTHTEC® must be followed.

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. EARTHTEC® will freeze. Always keep container closed. Store EARTHTEC® in its original container. Keep away from galvanized pipe and any nylon storage or handling equipment.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess EARTHTEC®, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by the 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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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.

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