

2023-0476  
2024-09-16

## EarthTec QZ

### Molluscicide Solution

For control of zebra and quagga mussels (adults and veligers) in enclosed ponds, lagoons, and sewage ponds, closed canals and reservoirs, and for pre-treatment of potable drinking water sources and storage tanks, as well as intake structures where water is collected from outdoor natural and man-made water courses and where no backflow of treated water occurs.

COMMERCIAL

ACTIVE INGREDIENT: Copper, 5.0 %, present as copper sulfate pentahydrate

REGISTRATION NO 35299  
PEST CONTROL PRODUCTS ACT

CAUTION



CORROSIVE



POISON

READ THE LABEL BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 1-1050, Bulk LITRES

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2023-0476  
2024-09-16

### **GENERAL INFORMATION:**

EarthTec QZ is a formulation that provides control of zebra and quagga mussels (adults and veligers) in enclosed ponds, lagoons, and sewage ponds, closed canals and reservoirs, and may be used for pre-treatment of potable drinking water sources and storage tanks, cooling water, municipal wastewater, as well as intake structures where water is collected from outdoor natural and man-made water courses, and where no backflow of treated waters occurs. EarthTec QZ is miscible in water and has ionic diffusion properties that cause it to readily disperse throughout treated water.

### **DIRECTIONS FOR USE**

Earthtec QZ is only to be applied in closed systems where there is no risk of outflow to open water systems. Follow the instruction for the relevant water bodies below.

For use in water wholly confined to the property of the user and where there is no outflow beyond the property limits.

DO NOT apply by air.

### **INTAKES AND FLOWING WATERS**

EarthTec QZ may be used in flowing waters to control the spread and colonization of zebra and quagga mussels. Where water flows continuously into an intake, use a metering pump to apply a dose of 0.5 to 8.3 ppm as EarthTec QZ (equivalent to 0.03 to 0.5 mg/L as elemental copper) in the treated water. Different water conditions, including colder water temperatures, may require longer treatment times.

Where intakes draw water from rivers or open bodies of water, EarthTec QZ treatments must be confined to water flowing into or within intake structures and filters. Apply EarthTec QZ at the specified dose using a metering pump and feed lines that direct the product into the flowing water.

Example dose rates for EarthTec QZ in flowing waters:

- 1 ppm (1 L EarthTec QZ in 1,000,000 L water) = 0.06 mg/L copper
- 2 ppm (2 L EarthTec QZ in 1,000,000 L water) = 0.12 mg/L copper
- 5 ppm (5 L EarthTec QZ in 1,000,000 L water) = 0.3 mg/L copper
- 8.3 ppm (8.3 L EarthTec QZ in 1,000,000 L water) = 0.5 mg/L copper

### **WATER BODIES**

EarthTec QZ may be used to control invasive zebra and quagga mussels in a water body or defined portions of a water body, including but not limited to dugouts, reservoirs, or lakes that are wholly contained on an industrial, municipal, farm or private property.

Where underwater structures are infested, treatment may be directed to the area immediately surrounding the structures to reduce fouling of the affected structure. Treatment must be

2023-0476  
2024-09-16

confined to industrial or municipal water reservoirs, natural and manmade reservoirs, ponds or similar bodies of water that are wholly contained to a user's property and do not permit outflow to other bodies of water. Do not apply or allow discharge to open water lakes or water courses with outflow.

Apply 1.2 to 8.3 mL of product per 1000 L of water (ppm), equivalent to 0.07 to 0.5 mg/L as copper. Dilution of 1 L product in 120,000 L of water yields 0.5 mg/L as copper. Add 1.66 mL per 1000 L to increase copper by 0.1 ppm. Apply near the water surface and allow to disperse or, where means exist, deliver product via hose and pump to the depths, sites and surfaces of worst infestation. When applying to large areas, dispersion will be aided by dispensing along a route with gaps no greater than 60 metres. Ideally, start near shore and move outward in bands. Repeat applications are permissible if needed to maintain lethal concentrations (>0.07 mg/L) of copper for a sufficient time period. When re-applying, do not exceed a resulting concentration of 0.5 mg/L of metallic copper (background + applied copper) in the treated water.

When calculating dose rates for a given volume of water, achieve a desired concentration of metallic copper in the water to be treated by using the following general formula:

$$\frac{\text{L of EarthTec QZ}}{\text{Million L to be treated}} \times 0.06 = \text{ppm (or mg/L) as copper in treated water}$$

For example, treating 3 million Litres of water with 4.5 L of EarthTec QZ will yield a final copper dose of 0.09 mg/L (ppm) as copper ( $= 4.5 / 3 \times 0.06$ ), or 90 ppb copper.

1 mg/L = 1 part per million

When applied to water destined for use as drinking water, those waters must receive additional and separate potable water treatment. Do not apply more than 1.0 ppm as metallic copper in these waters.

**DO NOT** apply this product in a way that will contact workers or bystanders, either directly or through drift. Only protected handlers may be in the area during application.

**DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

**DO NOT** use treated water to irrigate greenhouse food & non-food crops, or terrestrial crops for feed. Treated water may be used to irrigate terrestrial crops.

**DO NOT** use treated water for livestock drinking water.

**PRECAUTIONS**  
**KEEP OUT OF REACH OF CHILDREN.**

2023-0476  
2024-09-16

**Inhalation:** Harmful if inhaled. Concentrated vapour or mist will damage upper respiratory tract and be fatal. Repeated exposure may cause chronic bronchitis or respiratory inflammation.

**Skin contact:** Can cause irritation or burns. Repeated contact with dilute solutions may cause dermatitis.

**Eye contact:** Contact with eyes may result in permanent visual loss unless removed quickly by irrigation with water.

**Ingestion:** May be fatal if swallowed.

Wear goggles, long pants, a long-sleeved shirt and shoes plus socks during mixing/loading, application, clean-up and repair. In addition, wear chemical-resistant gloves during mixing/loading, clean-up and repair.

Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing/personal protective equipment immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

For cleaning/maintaining personal protective equipment, use detergent and hot water. Keep and wash personal protective equipment separately from other laundry. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

## **FIRST AID**

**IF IN EYES:** Hold eye 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 centre or doctor for treatment advice.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** Treat symptomatically.

2023-0476  
2024-09-16

**HANDLING:** Handling and storage equipment must be fibreglass, PVC, polypropylene, viton, aluminum or stainless steel. NEVER use nylon, copper, brass or mild steel parts or components in contact with full strength EarthTec QZ. Fabrics containing nylon or cotton will dissolve on contact with full strength EarthTec QZ. Always rinse equipment with plenty of fresh clean water. Do not allow product to freeze. Freezing will cause separation.

**DISPOSAL:** Dispose of EarthTec QZ through use. Do not pour into lakes or rivers, as this may kill fish. Neutralize spills with bicarbonate of soda or lime.

**DISPOSAL OF CONTAINER:**

**DISPOSAL: RECYCLABLE CONTAINER DISPOSAL:** DO NOT reuse this container for any purpose. This is a recyclable container and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial/territorial requirements.

For information on the disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial/territorial regulatory agency in case of a spill, and for clean-up of spills.

**ENVIRONMENTAL PRECAUTIONS:** TOXIC to aquatic organisms (copper sensitive aquatic plants, invertebrates, and fish). When fish are present, special application procedures must be followed. Contact distributor before treating water inhabited by fish.

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.