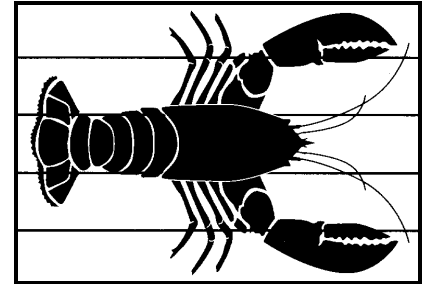




HTH® Dry Chlorinator for Use in: AQUACULTURE & PROCESSING



Advantages of HTH®* Dry Chlorinator: *HTH® Dry Chlorinator, which contains 70% available chlorine, is calcium hypochlorite, one of the most effective sanitizers known. It is convenient, easy to use and handle, doesn't require expensive, complex metering equipment or large storage tanks, and doesn't lose strength rapidly during storage. Be sure to comply with all government regulations for use.*

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RELATED INFORMATION

FISH and SHELLFISH FARMING

Lobster Ponds

HTH® Dry Chlorinator will kill bacteria and control the growth of algae in lobster storage ponds that are separated from the open water by flood gates.

First, remove all lobsters from the pond. Open the gates so the pond will drain. Then remove all seaweed, lobster parts and feed fragments. Apply 38 grams of HTH Dry Chlorinator, in tablet or granular form, to every square meter (or 0.25 ounces --about two teaspoons-- for two square feet) of exposed mud and silt surfaces. Be sure that every empty burrow has been exposed to HTH Dry Chlorinator.

For the next step, use an empty HTH drum with 0.75 cm (1/4 inch) holes drilled in the bottom half. At

dead low tide, place the drum in the shallow pool of water in front of the gates. Using a thoroughly clean, dry eight liter (two gallon) pail, add two or three pails of tablets or granular to the drum. After all the HTH Dry Chlorinator is dissolved, attach a hose to the suction end of a high pressure pump and spray equipment. Place the other end in the drum, then spray the chlorinated water on the face of the dam, gates and rocks to remove the slime and green algae. After spraying, remove the drum and any equipment, open the gates and allow the incoming tidewater to dissolve all the HTH Dry Chlorinator.

At high tide, close the gates for two or three days. After this period, all available chlorine should be used up. Open the gates to allow the tide to flush the pond free of debris and dead algae. After at least two tidal cycles, and after determining that no chlorine residual remains in the pond, the gates may be closed and lobsters returned to the pond. *Remember that calcium hypochlorite, even in minute quantities, is toxic to fish and lobsters.*

Conditioning Live Oysters

In a water-tight tank, thoroughly mix 0.8 grams of HTH Dry Chlorinator for each cubic meter of water (1 oz. per 10,000 gallons) to obtain 0.5 ppm available chlorine. Maintain water temperature at 10 to 20°C to prevent closure of the oyster shell and failure of self-purification. Expose oysters to this solution for at least 15 minutes, monitoring the available chlorine level so that it does not fall below 0.05 ppm. Repeat

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entire process if the available chlorine level drops below 0.05 ppm or the temperature falls below 10°C.

Fish Hatcheries

30 grams of HTH® Dry Chlorinator applied to every 100 liters (one ounce --three tablespoons) per 25 gallons) of water will sanitize fish tanks and raceways effectively.

Before treatment, remove all fish. Clean tanks and raceways thoroughly with soap and water to remove scum and dirt. Then rinse with clean water. Apply proper amount of HTH® Dry Chlorinator to the water in fish tanks and raceways. Allow one hour of exposure to this concentration, then rinse with clean water.

To sanitize other hatchery equipment, such as nets, use HTH chlorine solutions containing 200 ppm available chlorine. First clean equipment thoroughly. Place in the HTH chlorine solution and allow to remain for one hour. Then rinse thoroughly with clean water.

Fish Ponds

HTH® Dry Chlorinator will control the growth of algae and kill many of the bacteria found in fish ponds.

First, remove all fish from the pond. Then, for every cubic meter (1000 liters) or 500 gallons of water, use 15 grams or one ounce (three tablespoons) of HTH Dry Chlorinator scattered evenly over the surface. After waiting five minutes for the HTH Dry Chlorinator to disperse properly, test all parts of the pond for available chlorine. If the residual is below 1.0 ppm in any part of the pond, repeat the dosage of HTH Dry Chlorinator until 1.0 ppm is attained throughout. Stop treatment once the residual has reached 1.0 ppm and allow it to gradually drop to zero. (Again, calcium hypochlorite, even in small quantities, is toxic to fish.) Keep testing for available chlorine until the residual drops to zero in all parts of the pond. Only then should the fish be placed back in the pond.

To sanitize fish pond equipment, such as nets, use HTH chlorine solutions containing 200 ppm available chlorine. First clean equipment thoroughly. Place in the HTH chlorine solution and allow to remain for one hour. Then rinse thoroughly with clean water.

FISH PROCESSING PLANTS

Solutions of HTH® Dry Chlorinator will control the growth of bacteria and microorganisms that often occur in fish processing plants. Before treating with the HTH chlorine solution, scrub all surfaces thoroughly with hot water and washing powder to remove all soil.

Smooth Surfaces

HTH chlorine solutions containing 300 to 500 ppm available chlorine will sanitize smooth wood, metal or synthetic surfaces (new boxes, new tabletops, conveyor belts or machines). Wash surfaces with the HTH chlorine solution for two to five minutes. Wait two minutes, then rinse metal surface with fresh water.

Rough Surfaces

HTH chlorine solutions containing 1000 to 5000 ppm available chlorine will sanitize rough surfaces (worn tables, old boxes, concrete floors and walls). Wash surfaces with the HTH chlorine solutions for two to five minutes. Wait two minutes, then rinse metal surfaces with fresh water.

Fish Filleting

Solutions of HTH Dry Chlorinator will control the growth of slime on fish and prevent increasing bacterial count during the filleting and packaging stages. To accomplish this, fill a wash tank with water and add HTH Dry Chlorinator to a residual of 25 ppm. Place the eviscerated, degilled fish in the water. Remove fish from the water and refrigerate at 3°C (37.4°F) for 24 to 48 hours. The fish should then be scaled and washed again in an HTH chlorine solution as above. Then they are ready for filleting and packaging.

Related Information

HTH® Dry Chlorinator -- Product Data Bulletin
AD6158-297

HTH® Dry Chlorinator for Use in: Cleaning and
Sanitizing HTHADS97-6

HTH® Dry Chlorinator for Use in: Agriculture and
Food Processing HTHADS97-3

Please refer to the Material Safety Data Sheet (MSDS) for complete information on Storage and Handling, Toxicological Properties, Personal Protection, First Aid, Spill and Leak Procedures, and Waste Disposal. To order an MSDS, call your Arch sales office. Review the MSDS thoroughly before handling product.

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