

# **FLOWING WATER TREATMENTS (WITH THE EXCEPTION OF IRRIGATION CANALS): DRIP OR METERING SYSTEMS - ALGAE CONTROL**

General Information

## **PRODUCT INFORMATION**

Hydrothol 191 is a liquid concentrate soluble in water and is a highly effective aquatic algicide and herbicide. Apply when target algae and plants are actively growing. Note: Susceptibility of algae may vary due to subspecies, strains or environmental conditions. Dosage rates are measured in parts per million (ppm) endothall acid.

## **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.

- For quiescent or slow moving water treatments: Waters treated with Hydrothol 191 may be used for swimming, fishing, and irrigating turf, ornamental plants and crops immediately after treatment with the following exceptions: Do not use the Hydrothol 191 treated water to irrigate the following for 7 days after the treatment: annual nursery or greenhouse crops including hydroponics and newly seeded or transplanted annual crops, newly seeded or transplanted ornamentals, and newly sodded or seeded turf. Do not use treated water for animal consumption within the following periods:

0.3 ppm - 7 days after application

3.0 ppm - 14 days after application

5.0 ppm - 25 days after application

- For flowing water treatments: Waters treated with Hydrothol 191 may be used for

swimming, fishing, livestock watering, and irrigating turf, ornamental plants and crops immediately after treatment with the following exceptions: Do not use the Hydrothol 191 treated water to irrigate the following: annual nursery or greenhouse crops including hydroponics and newly seeded or transplanted annual crops, newly seeded or transplanted ornamentals, and newly sodded or seeded turf.

- Phytotoxicity is not expected on plants or crops irrigated with Hydrothol 191 treated water, however, all species and cultivars (varieties) have not been tested.
- Undiluted Hydrothol 191 may be injurious to crops, grass, ornamentals or other foliage.
- Do not use Hydrothol 191 treated water for chemigation as interactions between Hydrothol 191 and other pesticides and fertilizers are not known.
- Do not use Hydrothol 191 in waters containing Koi or hybrid goldfish. Hydrothol 191 is not intended for use in small volume garden pond systems.
- Fish may be killed by dosages in excess of 0.3 parts per million (ppm).
- Do not use Hydrothol 191 in brackish or saltwater.
- Wash out spray equipment with water after each operation.
- Avoid contact of spray concentrate (product) directly or by drift with non-target plants or crops as injury may result.
- Do not treat more than 10% of the area at one time with doses in excess of 1 ppm.

#### HOW TO APPLY:

Hydrothol 191 is a contact algicide and herbicide. Apply when target algae and plants are present. Hydrothol 191 should be sprayed on the water or injected below the water surface. It may be applied as a concentrate or diluted with water depending on the equipment. Hydrothol 191 can be applied to floating algae mats as a surface application. In instances where the algae or plant(s) to be controlled is an exposed surface problem (i.e. some of the broadleaved pond weeds) coverage is important. For best results, apply the concentrate with the least amount of water compatible with the application equipment.

## Drinking Water (Potable Water)

Consult with appropriate state or local water authorities before applying this product to public waters. State or local agencies may require permits.

The drinking water (potable water) restrictions on the label are to ensure that consumption of water by the public is allowed only when the concentration of endothall acid in the water is less than the MCL (Maximum Contamination Level) of 0.1 ppm. Applicators should consider the unique characteristics of the treated waters to assure that endothall acid concentrations in potable drinking water do not exceed 0.1 ppm at the time of consumption.

For Lakes, Ponds, and other Quiescent Water Bodies:

- For Hydrothol 191 applications, the drinking water setback distance from functioning potable water intakes in the treated water body must be greater than or equal to 600 feet.

- Note: Existing potable water intakes that are no longer in use, such as those replaced by a connection to a municipal water system or a potable water well, are not considered to be functioning potable water intakes.

For Irrigation Canals and other Flowing Water Bodies:

- Applicator is responsible to assure that treated water does not enter potable water intakes. For Hydrothol 191 applications, potable water intakes must be closed when treated water is present at the intake. In the event the water intake cannot be closed, treatments must only be made downstream from the intake in order to assure Hydrothol 191 treated water does not enter the potable water system.

Limitations, Restrictions, and Exceptions

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DRIP OR METERING SYSTEMS

For algae and aquatic plant control in flowing water, Hydrothol 191 recommended use rates can be found in the following chart. Apply Hydrothol 191 in a manner to achieve the desired rate and adequate mixing so Hydrothol 191 is distributed throughout the entire water column. Adequate concentration (rate) and exposure

time (length of treatment) will impact Hydrothol 191 efficacy on the target algae and plant species. Although Hydrothol 191 is a contact algicide and herbicide, adequate exposure time is critical. The rates and the length of treatment are guidelines to control the target species. The following rate chart has been developed based on Concentration Exposure Time (CET) data for Hydrothol 191. The CET concept allows rates and the length of exposure to be adjusted for different treatment scenarios.

Target Species:

- (Use in California limited to Cladophora, Pithophora, Spirogyra, Chara)

Duration: 6 - 120 hours

Restrictions:

- Do not apply more than a total of 5 ppm within a 7-day interval.
- There is no Pre-harvest Interval (PHI) for crops irrigated with treated water.

Method

[Spray](#)

Rates

[field rates 0](#)

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Timings

[When target algae and plants are present.](#)