

Fluridone: Answering Frequently Asked Questions

What is fluridone?

Fluridone is an herbicide used to control invasive or nuisance underwater plants like hydrilla and Eurasian watermilfoil. It has been registered for use in New York State waterbodies for over 30 years.

In treated waterbodies, fluridone is taken up by the target plant's roots or absorbed from the water by the plant's shoots. It works by disrupting the plant's ability to use light to make food (the process of photosynthesis).

How is fluridone applied?

The method of applying fluridone will vary based on the situation. It can be applied in granular form, as pellets, or in liquid form. Waterbodies containing target plants may need to be treated with fluridone for an extended period of time to reach the desired level of plant control.

In New York State, there are a number of products that are registered for use that contain the active ingredient fluridone. In most cases, aquatic applications of products containing fluridone in the State require a special permit issued by the New York State Department of Environmental Conservation (DEC), or special action by the U. S. Army Corps of Engineers under a federal law. These products can only be applied by a certified pesticide applicator licensed by DEC.

Are health effects expected from the treatment of water with fluridone?

Health impacts are not expected from exposure to fluridone through drinking water at concentrations that are used to control aquatic plants. Fluridone is applied to waterbodies at rates that result in low target concentrations, typically between two and 20 parts per billion (ppb) fluridone. Federal labeling allows target fluridone concentrations of 20 ppb or less in areas near potable water intakes, which is below the New York State drinking water standard of 50 ppb.

These fluridone concentration levels are also far below the U.S. Environmental Protection Agency (U.S. EPA) Human Health Benchmarks for Pesticides (HHBP) of 960 ppb. This federal HHBP for fluridone is based on specific toxicity studies for fluridone, and is set at a level that is not expected to result in health effects from long-term daily consumption in drinking water.

Can I use the body of water for recreational purposes during the fluridone treatment period?

There are no restrictions stated on the fluridone product labels that prohibit swimming or fishing at treatment sites. Based on information from toxicity studies conducted on laboratory animals, the U.S. EPA determined that dermal and/or eye irritation is not expected to occur among recreational water users from fluridone at permitted treatment concentrations. However, it is generally good practice to avoid areas where active pesticide treatments are taking place.

The DEC has regulations that restrict the use of pelletized fluridone products in waters that are less than two feet deep due to its potential to be an attractive nuisance to children (e.g., the pellets may be visible in shallow water and handled and/or ingested, by children wading in the water). Other restrictions can be imposed by DEC as part of their permitting process for specific fluridone treatments.

For more information:

Cornell Cooperative Extension of Tompkins County Fluridone FAQ:

<http://ccetompkins.org/environment/aquatic-invasives/hydrilla/management-options/herbicides/fluridone/fluridone-faq>

New York State Department of Environmental Conservation FAQ:

http://www.dec.ny.gov/docs/lands_forests_pdf/philhyd1216.pdf
