

Classified for
"RESTRICTED USE"
in New York State



ACCEPTED
FOR REGISTRATION

MAR 27 2009

FIFRA 24(C) under 6NYCRR Part 326

New York State Department
of Environmental Conservation
Division of Solid & Hazardous Materials
Pesticide Product Registration

SPECIAL LOCAL NEED (SLN) LABEL

SePRO Corporation 11550 N. Meridian St., Suite 600, Carmel, IN 46032 USA www.sepro.com

**This is a Restricted Use Pesticide in New York State
FOR DISTRIBUTION AND USE ONLY IN THE STATE OF NEW YORK**

Doc ID: 518052

Avast!* SC Herbicide

For Management of Aquatic Vegetation in Fresh Water Ponds, Lakes and Reservoirs

Active Ingredient:

fluridone: 1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1*H*)-pyridinone **41.7%**

Other Ingredients..... **58.3%**

Total..... **100.0%**

EPA Reg. No. 67690-30
EPA SLN No. SLN NY-05-0003

ATTENTION

- It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
- Read all directions carefully before applying.
- **In the state of New York, Avast! SC is registered under FIFRA Section 24(c) as a Special Local Need (SLN) registration. For the state of New York, this 24(c) supplemental labeling provides directions for use, including use precautions and limitations applicable to use of Avast! SC and supersedes directions for use on the product label.**
- **See product label for Precautionary Statements, Environmental Hazards, Storage and Disposal, Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies.**
- This labeling must be in the possession of the user at the time of application.
- **Notice to All Pesticide Applicators:** Before application under any project program, notification of and approval by the NYS Department of Environmental Conservation is required, either by an aquatic permit issued pursuant to ECL Section 15.0313(4) or issuance of purchase permits for such use.
- This supplemental labeling must accompany every container of Avast! SC (EPA Reg. No. 67690-30) sold or distributed in New York State.
- Avast! SC (EPA Reg. No. 67690-30) is a Restricted Use Pesticide in New York State and may be sold, offered for sale, distributed, possessed or used only by a certified applicator or purchase permit holder.
- Swimming in treated waters is prohibited for a period of 24 hours following application of Avast! SC
- All restrictions and precautions on the EPA registered label are to be followed.

DIRECTIONS FOR USE

AVAST! SC GENERAL INFORMATION

Avast! SC herbicide is a selective systemic aquatic herbicide for management of aquatic vegetation in fresh water ponds, lakes, reservoirs, drainage canals and irrigation canals. Avast! SC is absorbed from water by plant shoots and from hydrosoil by the roots of aquatic vascular plants. It is important to maintain the specified concentration of Avast! SC in contact with the target plants for a minimum of 45 days. Rapid water movement or any condition which results in rapid dilution of Avast! SC in treated water will reduce its effectiveness.

In susceptible plants, Avast! SC inhibits the formation of carotene. In the absence of carotene, chlorophyll is rapidly degraded by sunlight. Herbicidal symptoms of Avast! SC appear in seven to ten days and appear as white (chlorotic) or pink growing points. Under optimum conditions, 30 to 90 days are required before the desired level of aquatic plant management is achieved with Avast! SC. Species susceptibility to Avast! SC may vary depending on time of year, stage of growth, and water movement. For best results, apply Avast! SC prior to initiation of weed growth or when weeds begin active growth. Mature target plants may require an application rate at the higher end of the specified rate range and may take longer to control.

Avast! SC is not corrosive to application equipment.

The label provides recommendations on the use of a chemical analysis for the active ingredient. SePRO Corporation recommends the use of an Enzyme-Linked Immunoassay (ELISA Test) for the determination of the active ingredient concentration in the water. Contact SePRO Corporation for the utilization of this test and for the incorporation of this analysis in your treatment program. Other proven chemical analyses for the active ingredient may also be used. The chemical analysis is referenced in this label as the preferred method for the rapid determination of the concentration of the active ingredient in the water.

Application rates are provided in ounces or quarts of Avast! SC to achieve a desired concentration of the active ingredient in parts per billion (ppb). **The application rate or any single application must not exceed 50 ppb and the sum of all applications cannot exceed 150 ppb in ponds, lakes and reservoirs per annual growth cycle.** This maximum concentration is the amount of product calculated as the target application rate, NOT determined by testing the residues of the active ingredient in the treated water.

GENERAL USE PRECAUTIONS

- **Obtain Required Permits:** Consult with appropriate state or local water authorities before applying this product. Permits may be required by state or local public agencies.
- **Chemigation:** Do not apply Avast! SC through any type of irrigation system.
- **Hydroponic Farming:** Do not use Avast! SC treated water for hydroponic farming.
- **Greenhouse and Nursery Plants:** Do not use Avast! SC treated water for irrigating greenhouse or nursery plants. Use of an approved assay should confirm that residues are <1 ppb.

• **WATER USE RESTRICTIONS FOLLOWING APPLICATIONS WITH AVAST! SC (DAYS)**

Application Rate	Drinking [†]	Fishing	Swimming	Livestock/ Pet Consumption	Irrigation ^{††}
Maximum Rate (50 ppb) or less	0	0	1	0	See irrigation instructions below

[†] Note below, under *Potable Water Intakes*, the information for application of Avast! SC within ¼ mile (1,320 feet) of a functioning potable water intake.

^{††} Note below, under *Irrigation*, specific time frames or fluridone residues that provide the widest safety margin for irrigating with fluridone treated water.

- **Potable Water Intakes:** In lakes and reservoirs or other sources of potable water, do not apply Avast! SC at application rates greater than 20 ppb within one-fourth mile (1,320 feet) of any functioning potable water intake. At application rates of 6-20 ppb, Avast! SC may be applied within one-fourth mile (1,320 feet) of a functioning potable water intake providing potable use of the water is delayed for 24 hours. The water may be turned on prior to 24 hours if the active ingredient level in the water is below 50 ppb as determined by laboratory analysis. **Note: Existing potable water intakes which are no longer in use, such as those replaced by potable water wells or connections to a municipal water system, are not considered to be functioning potable water intakes.**
- **Irrigation:** Irrigation from an Avast! SC treated area may result in injury to the irrigated vegetation. Inform those who irrigate from areas treated with Avast! SC of the irrigation time frames or water assay requirements presented in the table below. Follow the following time frames and assay directions to reduce the potential for injury to vegetation irrigated with water treated with Avast! SC. Greater potential for crop injury occurs where Avast! SC treated water is applied to crops grown on low organic and sandy soils.

Application Site	Days after Application		
	Established Tree Crops	Established Row Crops/ Turf/Plants	Newly Seeded Crops/Seedbeds or Areas to be Planted Including Overseeded Golf Course Greens
Ponds and Static Canals [†]	7	30	Assay required
Canals	7	14	Assay required
Lakes and Reservoirs ^{††}	7	14	Assay required

[†] For purposes of Avast! SC labeling, a pond is defined as a body of water 5 acres or less in size. A lake or reservoir is greater than 5 acres.

^{††} In lakes and reservoirs where one-half or greater of the body of water is treated, use the pond and static canal irrigation precautions.

Where the use of Avast! SC treated water is desired for irrigating crops prior to the time frames established above, the use of ELISA or other appropriate means of analysis is strongly recommended to measure the concentration in the treated water. Where ELISA has determined that the concentrations are less than 10 parts per billion, there are no irrigation

precautions for irrigating established tree crops, established row crops or turf. **For tobacco, tomatoes, peppers or other plants within the Solanaceae Family and newly seeded crops or newly seeded grasses such as overseeded golf course greens, do not use Avast! SC treated water if measured fluridone concentrations are greater than 5 ppb. Furthermore, when rotating crops, do not plant members of the Solanaceae family in land that has been previously irrigated with fluridone concentrations in excess of 5 ppb. It is recommended that an aquatic specialist be consulted prior to commencing irrigation of these sites.**

PLANT CONTROL INFORMATION

Avast! SC selectivity is dependent upon dosage, time of year, stage of growth, method of application and water movement. The following categories, controlled, partially controlled, and not controlled are provided to describe expected efficacy under ideal treatment conditions using higher to maximum label rates. Use of lower rates will increase selectivity of some species listed as controlled or partially controlled. Additional aquatic plants may be controlled, partially controlled, or tolerant to Avast! SC. Consult an aquatic specialist prior to application of Avast! SC to determine a plant's susceptibility to Avast! SC.

MIXING AND APPLICATION DIRECTIONS

The aquatic plants present in the treatment site should be identified prior to application to determine their susceptibility to Avast! SC. It is important to determine the area (acres) to be treated and the average depth in order to select the proper application rate. Do not exceed the maximum labeled rate for a given treatment site per annual growth cycle.

Shake Avast! SC well before using. Add the specified amount amount of Avast! SC to water in the spray tank during the filling operation. Agitate while filling and during spraying. Surface or subsurface application of the spray can be made with conventional spray equipment. Avast! SC can also be applied near the surface of the hydrosol using weighted trailing hoses. A spray volume of 5 to 100 gallons per acre may be used. Avast! SC may also be diluted with water and the concentrated mix metered into the pumping system.

Tank Mix Directions

Avast! SC may be tank mixed with other aquatic herbicides and algaecides to enhance efficacy and plant selectivity. Refer to the companion herbicide or algaecide label for use directions, precautions, and restrictions on use.

APPLICATION TO PONDS

For purposes of the following Use Directions for ponds, a pond is defined as a waterbody 5 acres in size or less. Avast! SC may be applied to the entire surface area of a pond. The following rates must be followed to provide a concentration of 50 ppb of active ingredient in the pond. Application rates necessary to obtain these active ingredient concentrations in treated water are shown in the following table.

Average Water Depth of Treatment Site (feet)	Quarts of Avast! SC Per Treated Surface Acre	Ounces of Avast! SC Per Treated Surface Acre
1	0.13	4
2	0.27	8.5
3	0.4	13
4	0.54	17
5	0.67	21.5
6	0.8	24.8
7	0.9	28.8
8	1.0	32
9	1.17	37.4
10	1.3	41.6

VASCULAR AQUATIC PLANTS CONTROLLED IN PONDS BY AVAST! SC

Floating Plants:

Duckweed, Common (*Lemna minor*) -- Controlled only with a surface application.

Emerged Plants:

Spatterdock (*Nuphar luteum*)

Waterlily (*Nymphaea* spp.)

Submersed Plants:

Bladderwort (*Utricularia* spp.)

Coontail, Common (*Ceratophyllum demersum*)

Elodea, Common (*Elodea canadensis*)

Fanwort, Cabomba (*Cabomba caroliniana*)

Hydrilla (*Hydrilla verticillata*)

Naiad (*Najas* spp.)

Pondweed (*Potamogeton* spp.), except Illinois Pondweed

Watermilfoil (*Myriophyllum* spp.), except Parrotfeather

APPLICATION TO LAKES AND RESERVOIRS

The following treatments may be used for treating both whole lakes or reservoirs and partial areas of lakes or reservoirs (bays, etc.). For best results in treating partial lakes and reservoirs, Avast! SC treatment areas should be a minimum of 5 acres in size. Treatment of areas smaller than 5 acres or treatment of narrow strips such as boat lanes or shorelines may not produce satisfactory results due to dilution by untreated water. Rate ranges are provided as a guide to include a wide range of environmental factors, such as, target species, plant susceptibility, selectivity and other aquatic plant management objectives. Application rates and methods should be selected to meet the specific lake/reservoir aquatic plant management goals.

A. Whole Lake or Reservoir Treatments (Limited or No Water Discharge)

1. Single Application to Whole Lakes or Reservoirs

Where single applications to whole lakes or reservoirs are desired, apply Avast! SC at an application rate of 6 to 50 ppb. Application rates necessary to obtain these concentrations in treated water are shown in the following table. For additional rate calculations, refer to the section of this label entitled *Application Rate Calculation - Ponds, Lakes, and Reservoirs*. Choose an application rate from the table below to meet the aquatic plant management objective. Where greater plant selectivity is desired such as when controlling Eurasian watermilfoil and curlyleaf pondweed, choose an application rate lower in the rate range. For other plant species, an aquatic specialist should be contacted to determine when to choose application rates lower in the rate range to meet specific plant management goals. Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control plant species. Retreatments may be required to control more difficult to control species or in the event of a heavy rainfall event where dilution of the treatment concentration has occurred. In these cases, a second application or more may be required; however, the sum of all applications cannot exceed 150 ppb per annual growth cycle. Refer to the following section, *Split or Multiple Applications to Whole Lakes or Reservoirs*, for guidelines and maximum rate allowed.

Single Application of Avast! SC				
Average Water Depth of Treatment Site (feet)	<u>Quarts of Avast! SC per Treated Surface Acre to Achieve:</u>		<u>Fluid Ounces of Avast! SC Per Treated Surface Acre to Achieve:</u>	
	6 ppb	to 50 ppb	6 ppb	to 50 ppb
1	0.02	0.13	0.5	4.2
2	0.03	0.27	1.0	8.6
3	0.05	0.40	1.6	12.8
4	0.06	0.54	2.1	17.3
5	0.08	0.67	2.6	21.4
6	0.10	0.81	3.1	25.9
7	0.11	0.94	3.6	30.1
8	0.13	1.08	4.2	35.2
9	0.15	1.21	4.7	38.4
10	0.16	1.35	5.2	41.6
11	0.18	1.49	5.7	48.0
12	0.19	1.62	6.2	51.2
13	0.21	1.69	6.7	54.1
14	0.23	1.82	7.3	58.2
15	0.24	1.95	7.8	62.4
16	0.26	2.08	8.3	66.6
17	0.28	2.21	8.8	70.7
18	0.29	2.34	9.3	74.9
19	0.31	2.47	9.9	79.0
20	0.32	2.60	10.4	83.2

2. Split or Multiple Applications to Whole Lakes or Reservoirs

To meet certain plant management objectives, split or multiple applications may be desired in making whole lake treatments. Split or multiple application programs are desirable when the objective is to use the minimum effective dose and, through the use of a water analysis, add additional Avast! SC to maintain this lower dose for the sufficient time to ensure efficacy and enhance selectivity. Water may be treated at an initial application of 6 to 50 ppb. Additional split applications should be conducted to maintain a sufficient concentration for a minimum of 45 days or longer. In controlling Eurasian watermilfoil and curlyleaf pondweed and where greater plant selectivity is desired, choose an application rate lower in the rate range. For other plant species, an aquatic specialist should be contacted to determine when to choose application rates lower in the rate range to meet specific plant management goals. When utilizing split or multiple applications of Avast! SC, the utilization of ELISA or other appropriate means of analysis is strongly recommended to determine the actual concentration in the water over time. For split or multiple applications, the sum of all applications must not exceed 150 ppb per annual growth cycle.

NOTE: In treating lakes or reservoirs that contain functioning potable water intakes and the application requires treating within $\frac{1}{4}$ mile of a potable water intake, no single application can exceed 20 ppb. Additionally, the sum of all applications cannot exceed 150 ppb per annual growth cycle.

A. **Partial Lake or Reservoir Treatments**

Where dilution of Avast! SC with untreated water is anticipated, such as in partial lake or reservoir treatments, split or multiple applications may be used to extend the contact time to the target plants. The application rate and use frequency of Avast! SC in a partial lake is highly dependent upon the treatment area. An application rate at the higher end of the specified rate range may be required and frequency of applications will vary depending upon the potential of untreated water diluting the Avast! SC concentration in the treatment area. Use a rate at the higher end of the rate range where greater dilution with untreated water is anticipated.

1. Treatment Areas Greater Than $\frac{1}{4}$ Mile from a Functioning Potable Water Intake

For single applications, apply Avast! SC at application rates from 21 to 50 ppb. Split or multiple applications may be made; however, the sum of all applications cannot exceed 150 ppb per annual growth cycle. Split applications may be made to maintain a sufficient concentration in the target area for a period of 45 days or longer. The use of ELISA or other appropriate means of analysis is strongly recommended to maintain the desired concentration in the target area over time.

2. Treatment Areas Within $\frac{1}{4}$ Mile of a Functioning Potable Water Intake

In treatment areas that are within $\frac{1}{4}$ mile of a potable water intake, no single application can exceed 20 ppb. When utilizing split or multiple applications of Avast! SC for sites that contain a potable water intake, ELISA is required to determine the actual concentration in the water. Additionally, the sum of all applications cannot exceed 150 ppb per annual growth cycle.

VASCULAR PLANTS CONTROLLED BY AVAST! SC IN LAKES AND RESERVOIRS

1. **Plants controlled when applied to entire lakes or reservoirs at application concentrations of 6 to 20 ppb.**

Submersed Plants:

Eurasian watermilfoil (*Myriophyllum spicatum*)
Elodea, Common (*Elodea canadensis*)
Curlyleaf pondweed (*Potamogeton crispus*)
Naiad (*Najas* spp.)

2. **Plants controlled when applied to entire or partial lakes or reservoirs at application concentrations of 21 to 50 ppb:**

Floating Plants:

Duckweed, Common (*Lemna minor*) -- Recommended only when treating entire lakes or reservoirs and as a surface application.

Emersed Plants:

Spatterdock (*Nuphar luteum*)
Waterlily (*Nymphaea* spp.)

Submersed Plants:

Bladderwort (*Utricularia* spp.)
Coontail, Common (*Ceratophyllum demersum*)
Elodea, Common (*Elodea canadensis*)
Egeria, Brazilian Elodea (*Egeria densa*)
Fanwort, Cabomba (*Cabomba caroliniana*)
Hydrilla (*Hydrilla verticillata*)
Naiad (*Najas* spp.)
Pondweed (*Potamogeton* spp.), except Illinois Pondweed
Watermilfoil (*Myriophyllum* spp.), except Parrotfeather and Variable-Leaf

VASCULAR PLANTS NOT CONTROLLED BY AVAST! SC IN LAKES AND RESERVOIRS

Floating Plants:

Waterlettuce (*Pistia stratiotes*)

Emersed Plants:

American frogbit (*Limnobium spongia*)
Arrowhead (*Sagittaria* spp.)
Bacopa (*Bacopa* spp.)
Big floatingheart, Banana Lily (*Nymphoides aquatica*)
Bulrush (*Scirpus* spp.)
Floating waterhyacinth (*Eichhornia crassipes*)
Pickerelweed, lanceleaf (*Pontederia* spp.)
Rush (*Juncus* spp.)
Water pennywort (*Hydrocotyle umbellata*)

Shoreline Grasses:

Maidencane (*Panicum hemitomon*)

Note: algae (chara, nitella, and filamentous species) are not controlled by Avast! SC.

Application Rate Calculation - Ponds, Lakes and Reservoirs

The amount of Avast! SC to be applied to provide the desired ppb concentration of active ingredient in treated water may be calculated as follows:

- Quarts of Avast! SC required per treated surface area = Average water depth of treatment site (feet) x Desired ppb concentration of active ingredient x 0.0027

For example, the quarts per acre of Avast! SC required to provide a concentration of 25 ppb of active ingredient in water with an average depth of 5 feet is calculated as follows:

$$5 \times 25 \times 0.0027 = 0.33 \text{ quart per treated surface area}$$

When measuring quantities of Avast! SC, quarts may be converted to fluid ounces by multiplying quarts to be measured by 32. For example, 0.25 quarts x 32 = 8 fluid ounces.

NOTE: Calculated rates may not exceed the maximum allowable rate in quarts per treated surface acre for the water depth listed in the application rate table for the site to be treated.

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