

62719-546

07/17/2007

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U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505C)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, D.C. 20460

EPA Reg. Number: 62719-546
 Date of Issuance: 17 JUL 2007

NOTICE OF PESTICIDE:
 Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance: conditional -
 Expires July 16, 2012
 Name of Pesticide Product:
 GF-443 SC

Name and Address of Registrant (include ZIP Code):
 Dow AgroScience LLC
 9330 Zionsville Road
 Indianapolis, IN 46268-1054

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

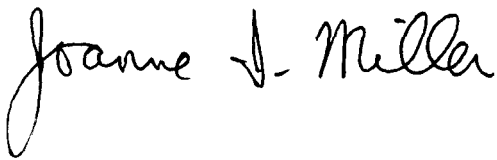
This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) and (B) provided that you:

1. Include the complete establishment number, and EPA Reg. No. 62719-546 on the label.
2. You will need to address any additional concerns, if any, with your previously submitted Field Accumulation Study in Bluegills, and Field Accumulation Study in Freshwater Clams and Catfish, once the reviews are completed.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records. If you have any questions, please contact Phil Errico at 703-305-6663.

Sincerely,

Signature of Approving Official:

 Joanne I. Miller
 Product Manager 23
 Herbicide Branch
 Registration Division (7505C)

Date:
 17 JUL 2007

[Sub-Label B: Aquatic Uses]

(Base Label):

GF-443 SC

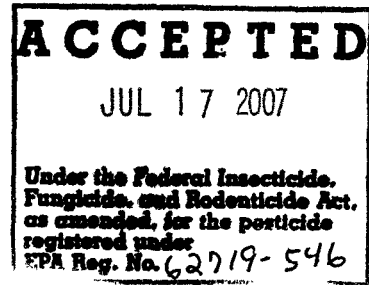
Herbicide

For the selective control of emergent, floating, and submersed aquatic weeds. Applications may be made: 1) In and around quiescent bodies of water, and 2) To exposed sediments of dewatered areas of quiescent bodies of water (non-flowing bodies of water).

Active Ingredient:

penoxsulam: 2-(2,2-difluoroethoxy)-6-trifluoromethyl-N-(5,8-dimethoxy[1,2,4]triazolo-[1,5c]pyrimidin-2-yl)benzenesulfonamide	21.7%
Other Ingredients	78.3%
Total	100.0%

Contains 2 lb of active ingredient per gallon.



**Keep Out of Reach of Children
CAUTION**

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful If Inhaled. Avoid breathing spray mist.

Personal Protective Equipment (PPE)

For all types of applications, mixers and loaders must wear:

- Long-sleeved shirt and long pants;
- Shoes plus socks; and
- Chemical-resistant gloves made of any waterproof material.

For in-water (i.e., subsurface) applications, applicators must wear:

- Short-sleeved shirt and long pants;
- Shoes plus socks; and
- Chemical-resistant gloves made of any waterproof material.

For non-water applications, applicators must wear:

- Long-sleeved shirt and long pants;
- Shoes plus socks; and
- Chemical-resistant gloves made of any waterproof material.

Remove and wash contaminated clothing before reuse. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

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Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

First Aid

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

Follow use directions carefully so as to minimize adverse effects on non-target vegetation. In order to avoid impact on threatened or endangered aquatic plant species, users should consult their State Fish and Game Agency or the U.S. Fish and Wildlife Service before making applications.

Refer to label booklet for Directions for Use including Storage and Disposal.

Notice: Read the entire label. Use only according to label directions. **Before using this product, read Terms and Conditions of Use, Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.**

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

Shake Well Before Using

EPA Reg. No. 62719-546

EPA Est. _____

Dow AgroSciences LLC • Indianapolis, IN 46268 USA

Net Contents _____

(Label Booklet Cover):

GF-443 SC

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Other Ingredients 78.3%

Total 100.0%

Contains 2 lb of active ingredient per gallon.

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CAUTION

Refer to inside of label booklet for additional precautionary information and Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal.

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(Page 1 through end):

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CAUTION

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- Long-sleeved shirt and long pants;
- Shoes plus socks; and
- Chemical-resistant gloves made of any waterproof material.

For in-water (i.e., subsurface) applications, applicators must wear:

- Short-sleeved shirt and long pants;
- Shoes plus socks; and
- Chemical-resistant gloves made of any waterproof material.

For non-water applications, applicators must wear:

- Long-sleeved shirt and long pants;
- Shoes plus socks; and
- Chemical-resistant gloves made of any waterproof material.

Remove and wash contaminated clothing before reuse. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
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If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

Follow use directions carefully so as to minimize adverse effects on non-target vegetation. In order to avoid impact on threatened or endangered aquatic plant species, users should consult their State Fish and Game Agency or the U.S. Fish and Wildlife Service before making applications.

Directions for Use

Shake Well Before Using

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

Storage and Disposal

Do not contaminate water, food or feed by storage and disposal.

Pesticide Storage: Store in cool dry place in original container.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal (Plastic): Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT

Do not use water from any treated site for food crop irrigation until residues are determined to be less than or equal to 1 ppb (see exceptions under Applications to Waters Used for Irrigation section of this label). Concentrations in food-crop irrigation water must be monitored until concentrations are 1 ppb or less. Water samples must be collected and analyzed using ELISA or other approved analytical methods. Please refer to all precautions and restrictions under the Applications to Waters Used for Irrigation section of this label.

Do not make in-water applications to areas subject to rapid dilution of treated water and/or where sufficient exposure with targeted vegetation can not be maintained, such as small spot or shoreline treatments in larger bodies of water.

General Information

GF-443 SC herbicide is a selective systemic aquatic herbicide for management of freshwater aquatic vegetation in: ponds, lakes, reservoirs, marshes, wetlands, bayous, drainage ditches, non-irrigation canals, and other quiescent bodies of water; shoreline, riparian, areas for the control of floating and emergent plant species; and dewatered areas of quiescent bodies of water.

GF-443 SC may be applied directly into water or sprayed onto emergent foliage of aquatic plants or exposed sediment after drawdown. Depending upon method of application and target plant, GF-443 SC is absorbed by aquatic vascular plants through emergent or floating leaves, from water through submersed plant shoots, or from hydrosol by roots. For in-water treatments, rapid water movement or any condition resulting in rapid dilution of GF-443 SC in treated water will reduce its effectiveness. Herbicidal symptoms of GF-443 SC include: immediate growth inhibition, a chlorotic growing point with some tissue reddening, necrosis of the terminal bud after 2 or more weeks of exposure, and slow plant death over a period of 60 to 120 days or longer depending upon conditions for in-water applications. The level of control will depend upon timing of initial application, application rate or concentration, exposure period, and weed species. Species susceptibility to GF-443 SC may vary depending upon time of year, stage of growth, and water movement. For best results, apply GF-443 SC immediately after weeds begin active growth. Application to mature target plants may require higher application rates and longer exposure periods to achieve control.

This label describes both required and recommended uses of a chemical analysis for the active ingredient. Dow AgroSciences recommends the use of an Enzyme-Linked Immunoassay (ELISA) test for the determination of the active ingredient concentration in water. Contact Dow AgroSciences for the incorporation of this analysis in your treatment program. Other proven chemical analysis for the active ingredient may also be used. The ELISA analysis is referenced in this label as the preferred method for the rapid determination of the concentration of the active ingredient in the water.

General Use Precautions and Restrictions

- Consult with appropriate state or local water authorities before applying this product. Permits and posting or treatment notification may be required by state or local public agencies. Consult the agency responsible for pesticide regulations for specific details.

- GF-443 SC must be applied by Dow AgroSciences-authorized applicators trained in Best Management Practices for use of the product.
- There are no restrictions on consumption of treated water for potable use or by livestock, pets or other animals.
- There are no restrictions on the use of treated water for recreational purposes, including swimming and fishing.
- **Chemigation:** Do not apply GF-443 SC through any type of irrigation system.
- For post-emergence foliar applications or exposed sediment treatments, GF-443 SC should be mixed with a surfactant. Use only surfactants that are approved or appropriate for aquatic use. Use of organosilicone surfactants with GF-443 SC is not recommended.
- For treatments out of water, do not permit spray mists containing GF-443 SC to drift onto desirable broadleaf plants as injury may occur. Further information on spray drift management is provided in the Spray Drift Management section of this label.

Application to Waters Used for Irrigation

Irrigation using water treated with GF-443 SC may result in injury to sensitive irrigated vegetation. The following restrictions are required for irrigation use of treated water:

- Do not use water treated with GF-443 SC for hydroponic farming.
- Do not apply GF-443 SC to water to be used for irrigation of greenhouse or nursery plants. Do not use water treated with GF-443 SC for irrigating greenhouse or nursery plants.
- Do not irrigate established food crops, other than rice, if concentrations of GF-443 SC in irrigation source water exceed 1 ppb as determined using ELISA or other analytical techniques. Do not irrigate established rice if concentrations in treated water exceed 30 ppb.
- There is no restriction on use of water treated with GF-443 SC for turf irrigation, if concentrations are less than 30 ppb. For other non-food crop irrigation (e.g., landscape ornamentals) or for other irrigation uses not described above, confer with Dow AgroSciences prior to commencing irrigation if concentrations in treated water exceed 1 ppb as determined using ELISA or other analytical techniques.
- Areas previously irrigated with water treated with GF-443 SC may be planted in rice or turf. For other food crops and in areas irrigated with GF-443 SC at concentrations exceeding 1 ppb, consult with Dow AgroSciences for site-specific risk evaluations before planting.
- **Do not apply GF-443 SC in flowing water.** When making applications near an active irrigation water intake, the intake must be shut-off until concentrations in the water are 1 ppb or less as determined using ELISA or other analytical techniques, except when irrigating turf or rice (see restrictions under "Applications to Waters Used for Irrigation"). The intakes must be shut off for a sufficient period of time to allow penoxsulam in treated water to decrease to 1 ppb or less at the intake before use can resume. Consult with state, federal, or local water authorities before making application near an active irrigation intake.
- **Application to Exposed Sediments:** GF-443 SC may be applied to exposed sediments of dewatered areas of quiescent bodies of water. Upon inundation, all label restrictions apply to the use of water from these treated areas.

Spray Drift Management

Avoiding spray drift is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. Make applications only when there is little or no hazard from spray drift. The applicator is responsible for considering all these factors when making decisions.

Avoid all direct or indirect contact with non-target plants. Do not apply near desirable vegetation. Allow adequate distance between target area and desirable plants to minimize exposure.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

1. The distance between the outer most nozzles on the boom must not exceed 70% of the wingspan of fixed-wing aircraft or 80% of the helicopter rotor width.
2. Nozzle set up must use a coarse spray quality category per ASABE S-572 Standard.

Where states have more stringent regulations, they must be followed.

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory. In general, the best drift management strategy is to apply the largest droplets that provide sufficient coverage and control.

Aerial Drift Reduction Advisory

Information on Droplet Size: For S-572 ASABE Standard compliance, see nozzle manufacturer catalogs, NAAA booklet, or USDA literature or website <http://apmru.usda.gov/> for nozzle and application conditions. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Larger droplets reduce drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

Controlling Droplet Size:

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released parallel to the air stream produces larger droplets than other orientations and is the recommended practice.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length: Reducing the effective boom length to 70% of the wingspan of fixed-wing aircraft or 80% of the helicopter rotor width may further reduce drift without reducing swath width.

Application Height: Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, the applicator must compensate for this displacement by adjusting the path of the aircraft or boom on-off. Swath adjustment distance should increase, with increasing drift potential (higher wind, height, smaller drops, etc.).

Wind: Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift. **Note:** State and local regulations with regard to minimum and maximum wind speeds during aerial application may be more restrictive. Aerial applicators should be familiar with these regulations.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is greatest when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a local, low level temperature inversion because drift potential is high. Small droplets can move in unpredictable directions due to the light

variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, known habitat for threatened or endangered species, non-target vegetation) is minimal (e.g., when wind is blowing away from the sensitive areas). Refer to the section of this label on Wind under Spray Drift Management for more specific details.

Aquatic Plants Controlled

Performance and selectivity of GF-443 SC is dependent upon dosage, time of year, stage of growth, method of application, and water movement. The following categories — controlled and partially controlled — are provided to describe expected efficacy under ideal treatment conditions using typical treatment rates. Plants listed as partially controlled are less susceptible under most use conditions but may show herbicide stress or partial control during active treatment phase. Use of lower rates will increase selectivity on some species listed below. Consult with Dow AgroSciences prior to applying GF-443 SC to determine best treatment protocols for given target vegetation.

Vascular Aquatic Plants Controlled

Common Name	Scientific Name
Floating Plants	
duckweed	multiple incl. <i>Lemna</i> spp. ¹
frog's bit	<i>Limnobium spongia</i>
mosquito fern	<i>Azola caroliniana</i>
water fern	<i>Salvinia minima</i> and <i>molesta</i>
water hyacinth	<i>Eichhornia crassipes</i>
water lettuce	<i>Pistia stratiotes</i>
Emersed Plants	
water pennywort	<i>Hydrocotyle umbellata</i>
Submersed Plants	
baby's tears	<i>Micranthemum</i> spp.
cabomba	<i>Cabomba caroliniana</i>
egeria, Brazilian elodea	<i>Egeria densa</i>
Eurasian watermilfoil	<i>Myriophyllum spicatum</i>
hydrilla	<i>Hydrilla verticillata</i>
sago pondweed	<i>Stuckenia pectinatus</i>

Vascular Aquatic Plants Partially Controlled

Common Name	Scientific Name
Floating Plants	
common watermeal	<i>Wolffia columbiana</i>
Emersed Plants	
alligatorweed	<i>Alternanthera philoxeroides</i>
arrowhead	<i>Sagittaria</i> spp. ¹
big floatingheart, banana lily	<i>Nymphoides aquatica</i>
parrotfeather	<i>Myriophyllum aquaticum</i>
pickerelweed, lanceleaf	<i>Pontederia</i> spp.

soft-stem bulrush	<i>Scirpus validus</i>
smartweed	<i>Polygonum spp.</i> ¹

Submersed Plants

bacopa	<i>Bacopa spp.</i> ¹
Illinois pondweed	<i>Potamogeton illinoensis</i> ¹
southern naiad	<i>Najas guadalupensis</i> ¹
spikerush	<i>Eleocharis spp.</i> ¹

¹Susceptibility will likely vary between species within this genus

Mixing Instructions**In-Water Application to Submersed or Floating Aquatic Weeds**

GF-443 SC can be applied undiluted or diluted with water for in-water applications. To dilute with water, it is recommended to fill spray tank to one-half full with water. Start agitation. Add correct quantity of GF-443 SC. Continue agitation while filling spray tank to required volume and during application.

Foliar Application to Floating and Emergent Weeds

Dilute GF-443 SC with water to achieve proper coverage of treated plants. To dilute with water, it is recommended to fill spray tank to one-half full with water. Start agitation. A surfactant must also be used with all post-emergent foliar applications of GF-443 SC. Use only surfactants that are approved or appropriate for aquatic use. Based upon surfactant label recommendations, add appropriate volume of surfactant when adding GF-443 SC to spray tank. Read and follow all use directions and precautions on aquatic surfactant label. After adding GF-443 SC and surfactant, continue agitation while filling spray tank to required volume and during application.

Exposed Sediment Application for Pre-Emergence Control of Aquatic Weeds

GF-443 SC must be diluted with water for pre-emergence, exposed sediment applications. To dilute with water, it is recommended to fill spray tank to one-half full with water. Start agitation. Add correct quantity of GF-443 SC. When using a surfactant, add appropriate volume of surfactant (based upon surfactant label recommendations) when adding GF-443 SC to spray tank. Read and follow all use directions and precautions on surfactant label. After adding GF-443 SC and any surfactant, continue agitation while filling spray tank to required volume and during application.

Tank Mixes with Other Aquatic Herbicides

GF-443 SC may be mixed with some approved herbicide products prior to treatment. Consult with Dow AgroSciences for latest recommendations prior to such use.

Application Methods**In-Water Application to Submersed or Floating Aquatic Weeds**

GF-443 SC can be applied as an in-water application to control aquatic weeds in ponds, lakes, reservoirs, marshes, wetlands, bayous, drainage ditches, non-irrigation canals, and other quiescent bodies of water.

Do not make in-water applications to areas subject to rapid dilution of treated water and/or where sufficient exposure with targeted vegetation can not be maintained, such as small spot or shoreline treatments in larger bodies of water.

Where greater plant selectivity is desired such as when controlling hydrilla and Eurasian watermilfoil or when targeting more susceptible species, choose an application rate lower in the rate range. Dow AgroSciences recommends contacting an aquatic specialist in determining when to choose application rates lower in the range to meet specific plant management goals.

Single In-Water Application to Treatment Zone: Where single applications to whole ponds, lakes, and reservoirs are desired, under typical treatment conditions GF-443 SC should be applied at a minimum effective concentration of 25 to 75 ppb. Choose an application rate to meet the aquatic plant management objectives. Application rates necessary to obtain these concentrations in treated water are shown below. It may be necessary to re-treat the body of water if mature or more tolerant vegetation is present in the target area or heavy rainfall has diluted the treatment concentration. If re-treatment is necessary, refer to the Split or Multiple In-Water Applications to Treatment Zone section of the label. **Note:** The concentration of any single application or sum of all applications must not exceed 150 ppb per annual growth cycle.

Split or Multiple In-Water Applications to Treatment Zone: Split or multiple applications of GF-443 SC may be desirable to ensure efficacy over time, maintain exposure, and enhance selectivity. Under typical treatment conditions or when targeting the most susceptible species, GF-443 SC should be applied initially at the minimum effective dose of 10 to 30 ppb to the treatment zone and, through the use of water analysis, add additional GF-443 SC to maintain the concentration to achieve specific plant management objectives. Re-treat the water to maintain a sufficient concentration for a minimum of 60 days or until satisfactory weed control is achieved. Higher concentrations and longer exposure times may be necessary when targeting less susceptible species, mature plants, and/or under conditions favorable for slower plant growth. Water analysis using ELISA is recommended to determine the actual concentration of GF-443 SC in the water over time. **Note:** The concentration of any single application or sum of all applications must not exceed 150 ppb per annual growth cycle.

Apply GF-443 SC to the treatment area at the appropriate rate to achieve target concentration. Define both size (in acres) and mean water depth (in feet) of the treatment zone prior to treatment. For each part per billion (ppb) of final concentration of active ingredient in the treatment zone, apply 0.174 fl oz per acre-foot of water. For example, for a 50 ppb treatment of 5 acres with a mean depth of 5 ft (25 acre-ft):

$$0.174 \text{ fl oz} \times 50 \text{ ppb} \times 25 \text{ acre ft} = 217.5 \text{ fl oz (6.8 quarts or 1.7 gallon) GF-443 SC applied}$$

The rate needed to treat 1 surface acre of water should be selected according to the rate chart below.

Average Water Depth (ft)	Target Concentration of Penoxsulam in Water (ppb)							
	5	10	20	25	50	75	100	150
	Fl oz (Qt) of GF-443 SC per Surface Acre at Specified Depth							
1	0.9 (0.03)	1.7 (0.05)	3.5 (0.11)	4.4 (0.14)	8.7 (0.27)	13.1 (0.41)	17.4 (0.54)	26.1 (0.82)
2	1.7 (0.05)	3.5 (0.11)	7.0 (0.22)	8.7 (0.27)	17.4 (0.54)	26.1 (0.82)	34.8 (1.09)	52.2 (1.63)
3	2.6 (0.08)	5.2 (0.16)	10.4 (0.33)	13.1 (0.41)	26.1 (0.82)	39.2 (1.22)	52.2 (1.63)	78.3 (2.45)
4	3.5 (0.11)	7.0 (0.22)	13.9 (0.44)	17.4 (0.54)	34.8 (1.09)	52.2 (1.63)	69.6 (2.18)	104.4 (3.26)
5	4.4 (0.14)	8.7 (0.27)	17.4 (0.54)	21.8 (0.68)	43.5 (1.36)	65.3 (2.04)	87.0 (2.72)	130.5 (4.08)
6	5.2 (0.16)	10.4 (0.33)	20.9 (0.65)	26.1 (0.82)	52.2 (1.63)	78.3 (2.45)	104.4 (3.26)	156.6 (4.89)
7	6.1 (0.19)	12.2 (0.38)	24.4 (0.76)	30.5 (0.95)	60.9 (1.90)	91.4 (2.86)	121.8 (3.81)	182.7 (5.71)
8	7.0 (0.22)	13.9 (0.44)	27.8 (0.87)	34.8 (1.09)	69.6 (2.18)	104.4 (3.26)	139.2 (4.35)	208.8 (6.53)
9	7.8 (0.24)	15.7 (0.49)	31.3 (0.98)	39.2 (1.22)	78.3 (2.45)	117.5 (3.67)	156.4 (4.89)	234.9 (7.34)
10	8.7 (0.27)	17.4 (0.54)	34.8 (1.09)	43.5 (1.36)	87.0 (2.72)	130.5 (4.08)	174.0 (5.44)	261.0 (8.15)

For in-water applications, the maximum target concentration in any treated area is 150 ppb active ingredient per annual growth cycle.

Foliar Application to Floating and Emergent Weeds

GF-443 SC can be applied as a foliar application to control floating and emergent weeds in ponds, lakes, reservoirs, marshes, wetlands, bayous, drainage ditches, non-irrigation canals, and other quiescent bodies of water; shoreline, and riparian areas. Applications should be conducted in a manner to maximize spray interception by target weeds while minimizing the amount of overspray that inadvertently enters the water.

For all foliar applications, apply GF-443 SC at the rate of 2 to 5.6 fl oz per acre. Use of a surfactant is required for all foliar applications of GF-443 SC. Use only surfactants that are approved or appropriate for aquatic use. Use of organosilicone surfactants with GF-443 SC is not recommended. Refer to the surfactant label for use directions. Apply GF-443 SC to actively growing weeds only. Do not apply to emerged weeds that are not actively growing due to moisture stress or stress due to adverse weather conditions.

Aerial Foliar Application to Floating and Emergent Weeds

Apply GF-443 SC in a spray volume of 10 gallons per acre (gpa) or more when making a post-emergence application by air. Apply with coarse droplet category per S-572 ASABE standard; see NAAA, USDA or nozzle manufacturer guidelines. Follow guidelines in the Spray Drift Management and Aerial Drift Reduction Advisory sections to minimize potential drift to off-target vegetation. Aircraft should be patterned per Operation Safe/PAASS program for calibration and uniformity to provide sufficient coverage and control.

Boat or Ground Foliar Application to Floating and Emergent Weeds

When applying GF-443 SC by boat or with ground equipment to emergent or floating-leaved vegetation, use boom-type, backpack or hydraulic handgun equipment. Apply GF-443 SC in a sufficient spray volume (up to 100 gpa) to provide accurate and uniform distribution of spray particles over the treated vegetation while minimizing runoff. Use higher spray volumes for medium to high density vegetation. For boom spraying, use coarse or coarser nozzle spray quality per S-572 ASABE standard; see USDA literature or nozzle manufacturer guidelines. Follow nozzle manufacturer's recommendations for nozzle pressure, spacing and boom height to provide a uniform spray pattern. Follow appropriate spray drift management information where drift potential is a concern.

Exposed Sediment Application for Pre- and Postemergence Control of Aquatic Weeds

GF-443 SC may be applied to exposed sediments of dewatered areas of quiescent bodies of water. Apply GF-443 SC at the rate of 5.6 to 11.2 fl oz per acre in a total spray volume of 20 to 100 gpa to the target area of exposed sediment using boom-type, backpack, or hydraulic handgun equipment for pre-emergence weed control. For boom spraying, use coarse or coarser nozzle spray quality per S-572 ASABE standard; see USDA literature or nozzle manufacturer guidelines. Follow nozzle manufacturer's recommendations for nozzle pressure, spacing and boom height to provide a uniform spray pattern. Follow appropriate spray drift management information where drift potential is a concern. Best treatment timing and rates will be based on various factors including current and historical rainfall, soil type, and timing of reflow, all of which should be discussed with Dow AgroSciences prior to treatment. A surfactant should also be used according to its label instructions. When present, do not apply to target emerged weeds that are not actively growing due to moisture stress or stress due to adverse weather conditions.

Refer to Applications to Waters Used for Irrigation section of this label for irrigation restrictions following exposed sediment applications. Consult with Dow AgroSciences for site specific recommendations for sampling water upon inundation.

Resistance Management

The mode of action of GF-443 SC is the inhibition of the acetolactate synthase (ALS) enzyme. Weed populations may develop biotypes that are resistant to different herbicides with the same mode of action. If herbicides with the same mode of action are used repeatedly at the same site, resistant biotypes may eventually dominate the weed population and may not be controlled by these products.

This product should be used as part of an Integrated Pest Management (IPM) program that may include biological, cultural, and chemical practices aimed at preventing economic and environmental pest damage. Application of this product should be based on appropriate IPM and resistance management strategies that delay or reduce the development of resistant weed biotypes. Such practices include, but are not limited to, tank mix combinations with dual-modes of action, herbicide rotation (i.e., use of alternate modes of action in subsequent treatment cycles), target plant susceptibility testing, GPS-assisted field survey and application methods, detailed in-treatment monitoring of herbicide concentrations to ensure proper dose and exposure period, and determination of optimal timing for treatment of target vegetation based on plant physiology and resource management goals for treated sites.

To delay development of herbicide resistance, the following practices are recommended:

- Treatment with GF-443 SC in successive years is not recommended unless conducted in combination with an herbicide with a different mode of action.
- Intensive target plant susceptibility testing in combination with rigorous and quantitative assessments of target plant distribution and health are strongly recommended before, during and after treatment.
- In conjunction with susceptibility testing, follow-up management of any surviving target plants found following treatment with GF-443 SC is recommended in the period immediately following treatment with GF-443 SC. This proactive follow-up management to contain or limit the spread of any potential resistant biotypes can include the use of contact herbicide or systemic herbicide with a different mode of action.

Stewardship Guidelines for Use

GF-443 SC must be applied by Dow AgroSciences-authorized applicators trained in best management practices (BMP) for use of the product, and BMP training is required every two years. The BMP components include: site assessment, prescription, and implementation. BMP have been developed to maintain and/or monitor target concentrations over large areas, ensure accurate applications and maximize treatment performance, minimize resistance development, and to monitor residues in water used for potential irrigation. Dow AgroSciences technical specialists will work with authorized applicators and resource managers to ensure compatibility with potential uses of the water and management objectives. State or local water authorities will be consulted before applying this product to obtain necessary permits and to comply with local posting and treatment notification requirements.

Most effective use of GF-443 SC, especially in larger treatment areas, requires knowledge of the concentration of GF-443 SC in treated water. This knowledge provides critical information for maximum performance, resistance management, irrigation restrictions, and overall product stewardship. This label describes both required and recommended uses of a chemical analysis for the active ingredient. Dow AgroSciences recommends the use of an Enzyme-Linked Immunoassay (ELISA) test for the determination of the active ingredient concentration in water. Contact Dow AgroSciences for the incorporation of this analysis in your treatment program.

Note: For all forms of GF-443 SC use, water sampling must be conducted as necessary to meet other label requirements for treated water use. Concentrations in food-crop irrigation water must be monitored until concentrations are 1 ppb or less before treated water may be used for irrigation.

In order to accurately determine the concentrations of GF-443 SC in treated water, recommendations for the minimum number of water sampling locations per treated area are provided below. The number of sampling locations will vary by site based on site morphology, bathymetry, inflows, presence of irrigation

intakes, and other plant management objectives. Site locations for such sampling should be geographically referenced (i.e., GPS coordinates) and evenly distributed throughout the treated water body. Consult with Dow AgroSciences for site specific recommendations.

Depending upon the application method and site specific information, water sample(s) should be collected every 10 to 30 days. Sampling should be conducted more frequently as necessary to comply with any water use restrictions and to ensure efficacy.

Size of Treated Area (acres)	Number of Water Sample Locations
<100	1
101 – 1000	1 – 3
1001 – 2500	3 – 5
2501 – 5000	5 – 8
5001 – 10,000	8 – 15
>10,001	1 additional site for every 1000 acres

Best practices for use of any aquatic herbicide demand the highest level of environmental assessment and stewardship. Treatment prescriptions should be tailored to meet site-specific resource management plans. Implementation of treatment programs should be conducted with equipment and protocols designed to increase treatment success through precision and quick reaction to changing environmental conditions.

Product specific stewardship guidelines for use of GF-443 SC are available from Dow AgroSciences. These guidelines are routinely updated to provide the latest best management practices for use of GF-443 SC, including assessment protocols, treatment techniques, and record keeping requirements. Contact Dow AgroSciences for further information.

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If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

Warranty Disclaimer

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT PERMITTED BY LAW, SELLER MAKES NO OTHER EXPRESS NOR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Seller. To the extent permitted by law, all such risks shall be assumed by Buyer.

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