## **Renovate® OTF**

Aquatic Herbicide

GROUP 4 HERBICIDE

# **SPECIMEN**



Aquatic Sites: For control of emersed, submersed and floating aquatic weeds in the following aquatic sites: ponds; lakes; reservoirs; marshes; wetlands; impounded rivers, streams and other bodies of water that are quiescent; non-irrigation canals, seasonal irrigation waters and ditches which have little or no continuous outflow.

For use in New York State, comply with Section 24(c) Special Local Need labeling for Renovate® OTF, SLN NY-070004.

#### **Active Ingredient**

triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid,

 triethylamine salt†
 14.0%

 Other Ingredients
 86.0%

 TOTAL
 100.0%

 †Acid equivalence: triclopyr - 10.0%

#### **Keep Out of Reach of Children**

### **CAUTION / PRECAUCIÓN**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Refer to inside of label booklet for additional precautionary information and Directions for Use Including First Aid and Storage and Disposal Information.

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

**AGRICULTURAL CHEMICAL:** Do not ship or store with food, feeds, drugs or clothing.

Renovate® is a registered trademark of Dow AgroSciences LLC.

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#### PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals** 

Causes moderate eye irritation. Avoid contact with eyes or clothing.

# Keep Out of Reach of Children CAUTION / PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

FIRST AID				
<ul> <li>Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 - 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> </ul>				
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. In case of emergency endangering health or the environment involving this product, call **INFOTRAC** at 1-800-535-5053.

#### **USER SAFETY RECOMMENDATIONS**

#### 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.

#### **ENVIRONMENTAL HAZARDS**

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Under certain conditions, treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants, which may cause fish suffocation. Therefore, to minimize this hazard do not treat more than one-half (½) of the water area in a single operation and wait at least 10 days between treatments when susceptible plants are mature and have grown to the water's surface, or when the treatment would result in significant reductions in total plant biomass. Begin treatment along the shore and proceed outwards in bands to allow fish to move into untreated areas. Waters having limited and less dense weed infestations may not require partial treatments.

**SPECIALITY CHEMICAL:** Do not ship or store with food, feeds, drugs or clothing.

#### **DIRECTIONS FOR USE**

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.

#### **PRODUCT INFORMATION**

When applying this product follow all applicable use directions, precautions and limitations.

#### For Aquatic and Wetland Sites:

Use Renovate® OTF herbicide for control of emersed, submersed and floating aquatic weeds in the following aquatic sites: ponds; lakes; reservoirs; marshes; wetlands; impounded rivers, streams and other bodies of water that are quiescent; non-irrigation canals, seasonal irrigation waters and ditches which have little or no continuous outflow. Renovate® OTF is formulated on biodegradable granules that, when applied to water bodies, immediately deliver Renovate® OTF down to the critical area for controlling target weeds.

**Obtain Required Permits:** Consult with appropriate state or local pesticide and/or water authorities before applying this product in or around public waters. Permits and posting or treatment notification may be required by state or local public agencies.

**Recreational Use of Water in Treatment Area:** There are no restrictions on use of water in the treatment area for recreational purposes, including swimming and fishing.

**Livestock Use of Water from Treatment Area:** There are no restrictions on livestock consumption of water from the treatment area.

#### **USE PRECAUTIONS AND RESTRICTIONS**

- For use in New York State, comply with Section 24(c) Special Local Need labeling for Renovate® OTF, SLN NY-070004.
- <u>Do not</u> apply this product in a way that will contact workers or other
  persons, either directly or through drift. Only protected handlers may be
  in the area during application. For any requirements specific to your
  state or tribe, consult the agency responsible for pesticide regulation.
- Chemigation:  $\underline{\text{Do not}}$  apply this product through any type of irrigation system.
- <u>Do not</u> apply to tidal salt water bays or estuaries.
- <u>Do not</u> apply directly to un-impounded rivers or streams.
- <u>Do not</u> apply where runoff water may flow onto agricultural land as injury to crops may result.

## APPLICATION TO WATERS USED FOR IRRIGATION Irrigation Restrictions

- <u>Do not</u> use treated water for irrigating greenhouse or nursery plants unless triclopyr concentrations are confirmed to be less than 1 ppb as determined using FasTEST® or other analytical techniques.
- <u>Do not</u> use water treated with Renovate® OTF for hydroponic farming unless triclopyr concentrations are confirmed to be less than 1 ppb as determined by FasTEST® or other analytical techniques.
- <u>Do not</u> apply Renovate® OTF directly to, or otherwise permit it to come into direct contact with grapes, tobacco, vegetable crops, flowers, or other desirable broadleaf plants, and do not permit dust to drift into these areas.
- This label describes both required and recommended uses of a chemical analysis for the active ingredient, triclopyr. SePRO

Corporation recommends the use of FasTEST® analysis for the determination of the active ingredient concentration in water. Contact SePRO Corporation for the incorporation of this analysis in your treatment program. Other proven chemical analysis for the active ingredient may also be used. The FasTEST® analysis is referenced in this label as the preferred method for the rapid determination of the concentration of the active ingredient in the water.

- Non-Food Crop Irrigation: There is no restriction on use of treated
  water to irrigate established grasses. If treated water is intended to be
  used to irrigate other non-crop areas not labeled for direct treatment
  with triclopyr (e.g., landscape ornamentals) or for other irrigation uses
  not described, consult with SePRO Corporation prior to commencing
  irrigation if triclopyr concentrations exceed 1.0 ppb.
- Food Crop Irrigation: Water treated with Renovate® OTF may not be used for crop or food-crop irrigation purposes for 120 days after application or until triclopyr concentrations are determined by laboratory analysis, or other appropriate means of analysis, to be 1.0 ppb or less. These restrictions apply to all applications of Renovate® OTF where water could be used for irrigation of crops or food-crops, including:
  - Seasonal Irrigation Waters: Renovate® OTF may be applied during the off-season to surface waters that are used for irrigation on a seasonal basis.
  - Irrigation Canals/Ditches: Those currently being used to transport irrigation water or that will be used for irrigation within 120 days following treatment

#### **APPLICATIONS TO POTABLE WATER SOURCES**

For applications of Renovate® OTF to control floating, emersed, and submersed weeds in sites that contain a functioning potable water intake for human consumption, see Table 1 to determine the minimum setback distances of the application from the functioning potable water intakes.

TABLE 1						
CONCENTRATION OF TRICLOPYR ACID IN WATER (PPM AE)						
Area Treated	0.75 ppm	1.0 ppm	1.5 ppm	2.0 ppm	2.5 ppm	
(acres)	Required Setback Distance (ft) from Potable				Potable	
	Water Intake					
< 4	300	400	600	800	1,000	
> 4 - 8	420	560	840	1,120	1,400	
> 8 - 16	600	800	1,200	1,600	2,000	
> 16 - 32	780	1,040	1,560	2,080	2,600	
> 32 acres,	Setback	Setback	Setback	Setback	Setback	
calculate a	(ft) = (800)	(ft) = (800)	(ft) = (800)	(ft) = (800)	(ft) = (800)	
setback using the	* In	* In	* In	* In	*In	
formula for the	(acres) -	(acres) -	(acres) -	(acres) -	(acres) -	
appropriate rate	160)/3.33	160)/2.50	160)/1.67	160)/1.25	160)	

Note: In = natural logarithm

Example Calculation 1: to apply 2.5 ppm Renovate® OTF to 50 acres:

Setback in feet =  $(800 \times 1n (50 \text{ acres})) - 160$ =  $(800 \times 3.912) - 160$ 

= 2,970 feet

**Example Calculation 2:** to apply 0.75 ppm Renovate® OTF to 50 acres:

Setback in feet = (800 x In (50 acres)) - 160

= (800 x 3.912) - 160 3.33

= 892 feet

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.

To apply Renovate® OTF around and within the distances noted above from a functioning potable water intake, the intake must be turned off until the triclopyr level in the intake water is determined to be 0.4 parts per million (ppm) or less by laboratory analysis, or other appropriate means of analysis.

#### **BEST MANAGEMENT PRACTICES FOR DRIFT MANAGEMENT**

Equipment used in the application of Renovate® OTF should be carefully calibrated to ensure it is working properly and delivering a uniform distribution pattern. Make aerial application only when the wind velocity is 2 to 10 mph.

Applications may be made only when there is little or no hazard for volatility or dust drift, and when application can maintain Renovate® OTF placement in the intended area. Very small quantities of dust, which may not be visible, may seriously injure susceptible plants, and Renovate® OTF may be blown outside of the intended treatment area under extreme

conditions. Do not spread Renovate® OTF when wind is blowing toward susceptible crops or ornamental plants that are near enough to be injured.

Avoiding drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for drift. The applicator is responsible for considering all these factors when making decisions.

**Ground Application Equipment:** To aid in reducing drift, Renovate® OTF may be applied when wind velocity is low (follow state regulations; see *Sensitive Area* under *Aerial Drift Reduction Advisory* below) or using a slurry injection or eductor system.

#### **AERIAL DRIFT REDUCTION ADVISORY**

This section is advisory in nature and does not supersede the mandatory label requirements.

**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 drift potential.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (e.g. higher wind).

**Wind:** Drift potential is lowest between wind speeds of 2 - 10 mph (follow state regulations). However, many factors, including 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 drift.

**Sensitive Areas:** Renovate® OTF 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 crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

#### AQUATIC WEEDS CONTROLLED BY RENOVATE® OTF

alligatorweed	milfoil species	white water lily (Nymphaea spp.)
American lotus	parrotfeather††	water primrose ( <i>Ludwigia</i> spp.)
bladderwort	pickerelweed	watershield (Brasenia spp.)
Eurasian watermilfoil	pennywort	yellow water lily ( <i>Nuphar</i> spp., spatterdock)
Flowering rush	smartweed	
hybrid milfoil	water	
(Myriophyllum spicatum	chestnut †, ††	
x sibiricum)		

<sup>†</sup> Not for use in California

#### **APPLICATION METHODS**

#### **Surface Application**

Use a mechanical spreader such as a fertilizer spreader, blower or mechanical seeder, or similar equipment capable of uniformly applying Renovate® OTF. Before spreading any product, carefully calibrate the application equipment. When using boats and power equipment, you must determine the proper combination of (1) boat speed, (2) rate of delivery from the spreader, and (3) width of swath covered by the granules.

Use the following formula to calibrate the spreader's delivery in pounds of Renovate $^{\rm e}$  OTF per minute:

Pounds per Minute = miles per hour X swath width (feet) X pounds per acre 495

#### **Aerial Application (Helicopter Only)**

Ensure uniform application. All equipment should be properly calibrated using blanks with similar physical characteristics to Renovate® OTF. To avoid streaked, uneven or overlapped application, use an appropriate tracking device (e.g. GPS). Refer to the *Aerial Drift Reduction Advisory* section of this label for additional precautions and instructions for aerial application.

#### **Floating and Emersed Weeds**

For control of water lily's (*Nymphaea* spp. and *Nuphar* spp.), watershield (*Brasenia* spp.), and other susceptible emersed and floating herbaceous weeds, apply 1.0 to 2.5 ppm a.e. triclopyr per acre. Apply when plants are actively growing.

<sup>††</sup> Retreatment may be needed to achieve desired level of control.

Use higher rates in the rate range when plants are mature, when the weed mass is dense, in areas of greater water exchange, or for difficult to control species. Repeat as necessary to control regrowth, but do not exceed a total of 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

#### **Submersed Weeds**

For control of Eurasian watermilfoil (*Myriophyllum spicatum*) and other susceptible submersed weeds, select the rates of Renovate® OTF according to Table 2 to provide a triclopyr concentration of 0.50 to 2.5 ppm a.e. in treated water. Use of higher rates in the rate range is recommended in areas of greater water exchange. These areas may require a repeat application. Split treatments over relatively short periods of time (e.g., 1 to 4 days) may be effective in some areas (e.g. small sites or sites with higher dilution potential) to maintain adequate exposure with target plants. However, total application of Renovate® OTF must not exceed an application rate of 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

For optimal control, apply when Eurasian watermilfoil or other submersed weeds are actively growing.

	TABLE 2					
CONCE	CONCENTRATION OF TRICLOPYR ACID IN WATER (PPM A.E.)					
Average Water	0.5 ppm	0.75 ppm	1.0 ppm	1.5 ppm	2.0 ppm	2.5 ppm
Depth (ft)	Pounds Renovate® OTF/Acre					
1	14	20	27	41	54	67
2	27	41	54	81	108	135
3	41	61	81	122	162	202
4	54	81	108	162	216	270

For applications greater in depth than 4 feet, when targeting difficult to control species, and/or in sites with high dilution potential, the following formula should be used to calculate applications rates should greater than 270 pounds of Renovate® OTF be needed to achieve desired weed control. NOTE: Do not exceed 2.5 ppm a.e. triclopyr for the treatment area per annual growing season.

**Pounds of Renovate® OTF per Acre =** average depth x target ppm x 27 Example Calculation:

6 foot average depth x 2.5 ppm x 27 = 405 pounds of Renovate® OTF per acre

For spot treatments or small treatment sites of ½ acre or less use Table 3 to determine the application rate depending on average water depth to achieve a concentration of 1.25 to 2.5 ppm a.e. Do not exceed 2.5 ppm a.e. triclopyr for the treatment area per annual growing season. Use higher rates in small treatment areas and in areas prone to higher dilution and for heavy weed infestation. Use the lower rates for spot treatment application of areas less prone to dilution and lighter weed infestations. For best results, split the total application rate into three equal applications 8 to 12 hours apart. Apply when water is calm.

Example: A 100 ft. x 40 ft. lakeshore swimming area with a 4 ft. average depth, heavily infested with Eurasian watermilfoil

- Step 1: Determine the area to be treated in square feet (ft²) by multiplying the length of the area by the width.
  - → 100 ft. x 40 ft. = 4,000 ft<sup>2</sup>
- Step 2: Determine the amount of Renovate® OTF to be used by consulting Table 3, *Pounds of Renovate® OTF for Areas Less Than % Acre.* 
  - → According to Table 3, use 24.7 lbs. of Renovate® OTF total based on 4 foot average depth.
- Step 3: Apply Renovate® OTF uniformly over weeds in treatment site in three equal applications of 8.2 lbs. each. 8 12 hours apart.

TABLE 3						
POUNDS OF RENOVATE® OTF FOR AREAS LESS THAN ½ ACRE						
A was (642)	3 foot ave	rage depth	4 foot average depth			
Area (ft²)	1.25 ppm a.e.	2.5 ppm a.e.	1.25 ppm a.e.	2.5 ppm a.e.		
500	1.2	2.3	1.5	3.0		
1,000	2.3	4.6	3.1	6.1		
4,000	9.3	18.6	12.4	24.7		
10,000	23.2	46.5	31.0	61.9		
20,000	46.5	93.0	62.0	123.9		

For applications with an area or depth not included in the above chart, use the following formula to calculate the application rates.

Pounds of Renovate® OTF = area (ft $^2$ )/43,560 x average depth x target ppm x 27

#### **Example Calculation:**

8,250 ft²/43,560 x 4 foot average depth x 1.25 ppm x 27 = 25.6 pounds of Renovate® OTF

Small treatment application of Renovate® OTF is recommended with waterproof gloves or a hand spreader to uniformly distribute flakes on target weeds.

#### **Wetland Sites**

Wetlands include flood plains, deltas, marshes, swamps, bogs, and transitional areas between upland and lowland sites. Wetlands may occur within forests, wildlife habitat restoration and management areas and similar sites as well as areas adjacent to or surrounding domestic water supply reservoirs, lakes and ponds.

For control of emersed, floating or submersed aquatic weeds in wetland sites, follow use directions and application methods associated with the *Floating and Emersed Weeds* or *Submersed Weeds* sections on this label.

#### **Use Precautions**

Minimize unintentional application to open water when treating target vegetation in wetland sites.

If any content on this label is not understood, or you need further assistance, contact a SePRO Corporation Aquatic Specialist with questions specific to your application.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. **Pesticide Storage:** Store in original container only. Do not store near feed or foodstuffs. In case of spill, contain material and dispose as waste

**Pesticide Disposal:** Wastes resulting from use of this product must be used according to label directions or disposed of at an approved waste disposal facility.

Nonrefillable Container Handling (non-rigid plastic bags, any size): Do not reuse or refill this container. Completely empty bag into application equipment. Offer for recycling if available. If recycling not available, then dispose of empty bag in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### **TERMS AND CONDITIONS OF USE**

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 *Limitations of Remedies*.

#### WARRANTY DISCLAIMER

SePRO Corporation warrants that the 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 CONSISTENT WITH APPLICABLE LAW, SEPRO CORPORATION MAKES NO OTHER EXPRESS OR 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 temperatures, 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 SePRO Corporation or the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

#### **LIMITATION OF REMEDIES**

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at SePRO Corporation's election, one of the following:

(1) Refund of purchase price paid by buyer or user for product bought, or (2) Replacement of amount of product used.

To the extent consistent with applicable law, SePRO Corporation shall not be liable for losses or damages resulting from handling or use of this product unless SePRO Corporation is promptly notified of such losses or damages in writing. To the extent consistent with applicable law, in no case shall SePRO Corporation be liable for consequential or incidental damages or losses.

The terms of the *Warranty Disclaimer, Inherent Risks of Use* and this *Limitation of Remedies* cannot be varied by any written or verbal statements or agreements. No employee or sales agent of SePRO Corporation or the seller is authorized to vary or exceed the terms of the *Warranty Disclaimer* or *Limitations of Remedies* in any manner.

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