

SECTION 18 EMERGENCY EXEMPTION USE DIRECTIONS

For use in connection with an emergency exemption authorized under the provisions of Section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended.

Effective period: May 11, 2009 to September 15, 2009

CASCADE™ (EPA Reg. No. 70506-176)

FOR USE IN IRRIGATION CANALS WITHIN TWIN FALLS COUNTY, IDAHO

DIRECTIONS FOR USE

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

Apply in a manner to achieve the desired rate and adequate mixing so the product is distributed throughout the entire water column. Adequate concentration (rate) and exposure time (length of treatment) will impact the efficacy of the herbicide (endothall) on the target weed species. Although endothall is a contact herbicide adequate exposure time is critical. The rates and the length of treatment are guidelines to provide control of the target species and assume that the entire canal is treated. This rate chart has been developed based on Concentration Exposure Time (CET) data for endothall. The CET concept allows rates and the length of exposure to be adjusted for different treatment scenarios.

Target Weed: Milfoil (Myriophyllum spp.) Parrot Feather (Myriophyllum sp.) Pondweeds (Potamogeton spp.)	0.5-1.0 ppm	1.0-2.0 ppm	2.0-3.0 ppm	3.0-4.0 ppm	4.0-5.0 ppm	Restriction A maximum of 30ppm per growing season, not to exceed 5ppm per application
Length of Treatment	48 hrs	24 hrs	12 hrs	8 hrs	6 hrs	
Target Weed: Coontail (Ceratophyllum spp.) Horned Pondweed (Zannichellia sp.) Hydrilla (Hydrilla verticillata) Naiad (Najas spp.) Water Stargrass (Heteranthera spp.)	0.5-1.0 ppm	1.0-2.0 ppm	2.0-3.0 ppm	3.0-4.0 ppm	4.0-5.0 ppm	A minimum of a 7-day application interval, with no PHI.
Length of Treatment	72 hrs	36 hrs	18 hrs	12 hrs	8 hrs	
Hygrophila (Hygrophila polysperma) may be suppressed with higher rates.						

To calculate the amount of Cascade required for a particular treatment use the following formula;

[CFS X Length of Treatment (hrs) X rate (ppm)] x 0.052947 = Gallons of Cascade needed for treatment

To calculate the amount of Cascade to be applied per hour use the following formula:

Gallons of Cascade needed per hour = Total gallons of Cascade / Length of Treatment (hrs)

The “Directions For Use” of this product reflects the cumulative inputs from both historical field use and product testing programs. Actual field conditions may vary. Phytotoxicity is not expected, however all crop (species) and cultivars (varieties) have not been tested.

Precautions: Crops have been shown to exhibit tolerance to endothall, however environmental and physiological stress may cause some crops to be susceptible.

Personal Protective Equipment (PPE)

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Socks and shoes
- a NIOSH-approved respirator with a dust/mist filter with MSHN/NIOSH approval number prefix TC-21C or any N, R, P, or He filter.

Exception: During application, the respirator need not be worn, *provided* that the pesticide is applied in a manner (such as direct metering or subsurface release from the rear of a vessel that is moving into the wind) that the applicator will have no contact with the pesticide.

- Chemical resistant gloves
- Protective eyewear

See engineering controls for additional options.

User Safety Requirements:

Follow the manufacturers’ instructions for cleaning/maintaining PPE. If no such instructions for washable exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse them.

Engineering Controls:

When mixers and loaders use a closed system designed by the manufacturer to enclose the pesticide to prevent it from contacting handlers or other people AND the system is functioning properly and is used and maintained in accordance with the manufacturers written operating instructions, the handlers need not wear a respirator, provided the required respirator is immediately available for use in an emergency such as a spill or equipment breakdown.

User Safety Recommendations:

Users should:

- Wear appropriate protective eyewear such as goggles, face shield, or safety glasses.
- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

BEFORE USING CASCADE, READ AND FOLLOW ALL APPLICABLE DIRECTIONS, RESTRICTIONS AND PRECAUTIONS ON THE EPA REGISTERED FEDERAL LABEL. THIS LABEL MUST BE IN THE POSSESSION OF THE USER AT THE TIME OF PESTICIDE APPLICATION.

The EPA Headquarters and EPA Regional Office shall immediately be informed of any adverse effects or misuse resulting from applications made in connection with this specific exemption.