

## **PERENNIAL WEEDS - WATERHYACINTH**

### General Information

#### GENERAL INFORMATION

This product, a water-soluble liquid, mixes readily with water and nonionic surfactant to be applied as a foliar spray for the control or destruction of many herbaceous and woody plants.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days but on most perennial brush species may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow the activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise directed on the label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the "Weeds Controlled" section of the label.

Unemerged plants arising from unattached underground rhizomes or root stocks of perennials or brush will not be affected by the spray and will continue to grow. For this reason best control of most perennial weeds or brush is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of this product per acre within the recommended range when vegetation is heavy or dense.

Do not treat weeds or brush under poor growing conditions such as drought stress, disease or insect damage, as reduced control may result. Reduced results may also occur when treating weeds or brush heavily covered with dust.

Reduced control may result when applications are made to any weed or brush species that have been mowed, grazed or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the product off the foliage and a repeat treatment may be required.

When this product comes in contact with soil (on the soil surface or as suspended soil or sediment in water) it is bound to soil particles. Under recommended use situations, once this product is bound to soil particles, it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treatment area or if the soil is transported off-site.

Under recommended use conditions, the strong affinity of this product to soil particles prevents this product from leaching out of the soil profile and entering ground water. The affinity between this product and soil particles remains until this product is degraded, which is primarily a biological degradation process carried out under both aerobic and anaerobic conditions by soil microflora.

This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed stated maximum use rate.

Buyer and all users are responsible for all loss or damage in connection with the use or handling or mixtures of this product or other materials that are not expressly recommended in the label. Mixing this product with herbicides or other materials not recommended in the label may result in reduced performance.

#### ATTENTION

**AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.**

AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

NOTE: Use of this product in any manner not consistent with the label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

## MIXING AND APPLICATION INSTRUCTIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES. HAND-GUN APPLICATIONS SHOULD BE PROPERLY DIRECTED TO AVOID SPRAYING DESIRABLE PLANTS. NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

## APPLICATION EQUIPMENT AND TECHNIQUES

### Aerial Equipment

Use the recommended rates of this product and surfactant in 3 to 20 gallons of water per acre as a broadcast spray, unless otherwise specified. Aerial applications of this product may only be made as specifically recommended in the label.

### Boom Equipment

For control of weed or brush species listed in this section using conventional boom equipment - Use the recommended rates of this product and surfactant in 3 to 30 gallons of water per acre as a broadcast spray, unless otherwise specified. As density of vegetation increases, spray volume should be increased within the recommended range to ensure complete coverage. Carefully select correct nozzle to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

### Hand-Held and High-Volume Equipment

#### Use Coarse Sprays Only

For control of weeds listed in this section using knapsack sprayers or high-volume spraying equipment utilizing handguns or other suitable nozzle arrangements - Prepare a 3/4 to 2 percent solution of this product in water, add a nonionic surfactant and apply to foliage of vegetation to be controlled. For specific rates of

application and instructions for control of various annual and perennial weeds.

Applications should be made on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff.

This product may be used as a 5 to 8 percent solution for low-volume directed sprays for spot treatment of trees and brush. It is most effective in areas where there is a low density of undesirable trees or brush. If a straight stream nozzle is used, start the application at the top of the targeted vegetation and spray from top to bottom in a lateral zigzag motion.

Ensure that at least 50 percent of the leaves are contacted by the spray solution. For flat fan and cone nozzles and with hand-directed mist blowers, mist the application over the foliage of the targeted vegetation. Small, open-branched trees need only be treated from one side. If the foliage is thick or there are multiple root sprouts, applications must be made from several sides to ensure adequate spray coverage.

Prepare the desired volume of spray solution by mixing the amount of this product in water, shown in the table on the label.

For use in knapsack sprayers, it is suggested that the recommended amount of this product be mixed with water in a larger container. Fill sprayer with the mixed solution and add the correct amount of surfactant.

## Limitations, Restrictions, and Exceptions

### Perennial Weeds

Apply this product as follows to control or destroy most vigorously growing perennial weeds. Unless otherwise directed, allow at least 7 days after application before disturbing vegetation.

Add 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution to the rates of this product given in this list. See the "General Information," "Directions for Use" and "Mixing and Application" sections in the label for specific uses and application instructions.

NOTE: If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages. Fall treatments must be applied before a killing frost.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed.

## WATERHYACINTH

Apply 5 to 6 pints of this product per acre as a broadcast spray or apply a 3/4 to 1 percent solution with hand-held equipment. Apply when target plants are actively growing and at or beyond the early bloom stage of growth. After application, visual symptoms may require 3 or more weeks to appear with complete necrosis and decomposition usually occurring within 60 to 90 days. Use the higher rates when more rapid visual effects are desired.

### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Hand-Held Spray](#)

### Rates

[field rates 0](#)

[field rates 1](#)

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### Timings

[Apply when target plants are actively growing and at or beyond the early bloom stage of growth.](#)