

# **RANGELAND AND PERMANENT PASTURES (INCLUDING BUT NOT LIMITED TO RANCHETTE PASTURES) - SPOTTED AND DIFFUSE KNAPWEED**

## General Information

### GENERAL INFORMATION:

This product is recommended for selective, postemergence control of broadleaf weeds in rangeland and permanent grass pastures (including but not limited to ranchette pastures), and in non-crop land areas including equipment pathways, industrial manufacturing and storage sites and rights-of-way such as along roadsides, electrical lines and railroads. Use on these sites may include application to grazed areas.

### GENERAL USE PRECAUTIONS:

- In Arizona: The state of Arizona has not approved this product for use on plants grown for agricultural/commercial production, such as on designated grazing areas.
- In Florida: For control of kudzu in utility rights-of-way, roadsides, fence lines, and other non-crop areas this product may only be used in the following counties: Baker, Bay, Bradford, Calhoun, Columbia, Escambia, Franklin, Gadsden, Gulf, Hamilton, Homes, Jackson, Jefferson, Lafayette, Leon, Liberty, Madison, Okaloosa, Santa Rosa, Suwannee, Taylor, Union, Wakulla, Walton, and Washington.
- In New York, the maximum application rate for this product is 2/3 pint per acre per growing season. Do not exceed a cumulative amount of 2/3 pint of clopyralid per acre per crop year.
- Not for Sale, Use or Distribution in Nassau and Suffolk Counties in New York State.
- Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.
- Do not use in greenhouses.
- Chemigation: Do not apply this product through any type of

irrigation system.

- Do not transfer livestock from treated grazing areas to sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated pasture. If livestock are transferred within less than 7 days of grazing untreated pasture, urine and manure may contain enough clopyralid to cause injury to sensitive broadleaf plants.

#### Avoid Injury to Non-target Plants:

This product can affect susceptible broadleaf plants directly through foliar contact and indirectly by root uptake from soil in treated areas. Do not allow spray drift to come in contact with vegetables, flowers, tomatoes, potatoes, beans, lentils, peas, alfalfa, sunflowers, soybeans, safflower, or other desirable broadleaf crops or ornamental plants or soil where sensitive crops will be planted the same season.

Do not spray pastures if injury to existing forage legumes or other desirable broadleaf plants cannot be tolerated. THISTLEDOWN® may injure or kill legume and certain other broadleaf plants. However, the stand and growth of established perennial grasses is usually improved after spraying, especially when rainfall is adequate and grazing is deferred. Established grasses are tolerant to this product but newly seeded grasses may be injured until well established as indicated by tillering, development of a secondary root system, and vigorous growth.

**Avoid Movement of Treated Soil:** Avoid conditions under which soil from treated areas may be moved or blown to areas containing susceptible plants. Wind-blown dust containing clopyralid may produce visible symptoms, such as epinasty (downward curving or twisting of leaf petioles or stems) when deposited on susceptible plants; however, serious injury is unlikely. To minimize potential movement of clopyralid on wind-blown dust, avoid treatment of powdery dry or light sandy soils until soil is settle by rainfall or irrigation or irrigate shortly after application.

**Residues in Plants or Manure:** Do not use plant residues, including hay or straw from treated areas, or manure or bedding straw from animals that have grazed or consumed forage from treated areas for

composting or mulching where susceptible plants may be grown the following season. Plant materials and/or manure contain enough clopyralid to cause injury to susceptible plant species. Do not spread manure from animals that have grazed or consumed forage or hay from treated areas on land used for growing susceptible broadleaf crops. To promote herbicidal decomposition, plant residues should be evenly incorporated or burned. Breakdown of clopyralid in crop residues or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.

**Avoid Spray Drift:** Avoid spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible broadleaf plants during active growth or dormant periods. Use coarse sprays to minimize drift.

**Sprayer Clean-Out:** To avoid injury to desirable plants, equipment used to apply this product should be thoroughly cleaned before reusing to apply any other chemicals.

1. Rinse and flush application equipment thoroughly at least 3 times with water after use. Dispose of rinse water by application to treatment area or in non-cropland area away from water supplies.
2. During the second rinse, add 1.28 fl. oz. of household ammonia for every 1 gallon of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 minutes). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Remove nozzles and screens and clean separately.

#### MIXING INSTRUCTIONS:

1. Add  $\frac{3}{4}$  of the required spray volume to the spray tank and start agitation.
2. Add the required amount of this product.
3. Agitate during final filling of the spray tank and maintain sufficient agitation during application to ensure uniformity of the spray mixture.

Note: If allowed to stand after mixing, agitate spray mixture before reuse.

#### Limitations, Restrictions, and Exceptions

#### BROADLEAF WEED CONTROL IN RANGELAND AND PERMANENT PASTURES (INCLUDING BUT NOT LIMITED TO RANCHETTE PASTURES):

Use this product to control susceptible broadleaf weeds on rangeland areas or established forage grasses in permanent grass pastures. Best results on most weeds are obtained when weeds are small and actively growing.

There are no grazing restrictions following this product's applications when used at labeled rates.

#### Application Rates:

Apply this product at a rate of  $\frac{1}{8}$  to  $\frac{1}{2}$  fl. oz. per 1,000 sq. ft. in 2 gallons of water when weeds are young and actively growing. This product may be applied as described below for control of spotted and diffuse knapweed, Canada thistle, musk thistle, yellow starthistle and suppression of Russian knapweed. Use the lower labeled application rate for young, actively growing weeds. The higher rate should be used under less favorable conditions, or on dense weed stands and/or larger weeds.

#### To Control Spotted and Diffuse Knapweed:

$\frac{1}{4}$  to  $\frac{3}{8}$  fl. oz. per 1,000 sq. ft.

Application Timing: Apply any time plants are actively growing, including fall regrowth. Optimum time is from mid bolt to late bud stage of growth.

## Precautions:

- Some desirable broadleaf plants (forbs) are susceptible to this product. Do not spray pastures containing desirable forbs, especially legumes, unless injury can be tolerated. However, the stand and growth of established perennial grasses is usually improved after treatment, especially if rainfall is adequate for active plant growth and grazing is deferred.
- Established grasses are tolerant to this product, but new grass seedlings may be injured to varying degrees until well established as evidenced by development of secondary roots and tillering (multiple stems).
- Do not use hay or straw from treated areas for composting or mulching on susceptible broadleaf crops.

## Method

[Spray](#)

Rates

[field\\_rates 0](#)

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## Timings

[Postemergence \(Weed\)](#)

[Apply any time plants are actively growing, including fall regrowth. Optimum time is from mid bolt to late bud stage of growth.](#)