

# **NON-CROPLAND APPLICATION - ANNUAL AND PERENNIAL WEEDS**

## General Information

## Product Description

Designed for turfgrass applications, non-crop, and IVM (Industrial Vegetation Management) applications, this product contains four active ingredients.

(1) Triclopyr provides broad-spectrum weed control for some of the tough broadleaf weeds such as wild violet, ground ivy, oxalis and wild blackberry.

(2) Sulfentrazone causes desiccation and yellowing of plant tissue on emerged, susceptible weeds. Sulfentrazone is in the aryl triazolinone family and inhibits protoporphyrinogen oxidase (Protox), a pivotal enzyme in chlorophyll production. Without this key enzyme, a build-up of peroxide-like compounds occurs, thus causing the plant cell membranes of weeds to rupture. Sulfentrazone provides post emergent weed control for common weed species in turfgrass such as spurge and thistles and suppression of yellow nutsedge.

(3) 2,4-D is an auxin-type herbicide, which is a class of plant growth regulators. It is absorbed through the leaves and is translocated to the growing points of the plant, causing weed stems curl and twist leaf cupping and withering, and eventual plant death.

(4) Dicamba is absorbed through the leaves and roots and has multiples modes of actions for hard-to-kill broadleaf weeds.

Combining these herbicides provides a very wide spectrum of weed control for tough and susceptible weeds. Foundation Herbicide controls weeds by affecting multiple sites within the broadleaf weeds. The symptoms of susceptible broadleaf weeds include leaf and stem curl or twisting, and weed yellowing.

These combined herbicides provide limited residual activity.

Foundation Herbicide offers these advantages:

- Excellent postemergent activity with proven performance.

- This product exhibits improved cool-weather performance compared to standard “3-way amines”.
- High selectivity (turfgrass safety) in established cool-season turfgrass.
- Sulfentrazone combinations provide rapid and effective weed control for common and troublesome ( tough) weed species in turfgrass, including: dandelion, spurge and white clover.
- The speed of action (rate of weed phytotoxicity) and the early weed symptoms are features of sulfentrazone combinations compared to standard “3-way amines”. Often, the weed injury symptoms can be noticed within hours of the application and plant death can occur within 10 to 14 days.
- Triclopyr combinations broaden the weed control spectrum to include many woody and hard-to-control species.
- This product is generally rainfast in as little as 6 hours.

## Where To Use

This product provides broadleaf control in the following sites.

- Ornamental Turfgrass sites:
  - Residential/domestic sites are defined as areas associated with the household or home life including, but not limited to apartment complexes condominiums, and patient care areas of nursing homes, mental institutions, hospitals, or convalescent homes.
  - Ornamental turf sites include turfgrass established around residences, parks, streets, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, fairgrounds, areas adjacent to athletic fields and paved areas.

- Institutional sites are defined as turf areas around proper ties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses (fairways and roughs), and office buildings.
- Non-cropland sites: including farmyards, fencerows or fence lines, highway rights-of-way (principal, interstate, county, private, and unpaved roads): Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians; Industrial sites: Lumberyards, tank farms, fuel or equipment storage areas; Municipal, state, and federal lands: Airports and military installations; railroad rights-of-ways, railroad yards, railroad crossings and railroad bridge abutments; Utility rights-of-way: telephone, pipeline, electrical powerlines, and communication transmission lines.
- Agricultural site: Commercial sod production

#### Prohibitions of Sites:

- Do not apply to any body of water such as lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays). Do not apply to any shorelines (non-cropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to wetlands (swamps, bogs, potholes, or marshes).
- Do not apply to agricultural irrigation water or on agricultural irrigation ditchbanks and canals.
- Do not apply to agricultural drainage water or on agricultural ditchbanks.
- Do not apply to sites being used for commercial timber or seed production, or to other non-turf plants being grown for sale or other commercial use.
- Do not apply or allow this product to come into direct contact with cotton, grapes, tobacco, vegetable crops, flowers, fruit or ornamental trees, or other desirable broadleaf plants; small amounts of spray drift may injure susceptible plants, including ornamental trees or shrubs.

#### Turfgrass tolerance:

- The turfgrass tolerance to this product may vary and temporary turfgrass yellowing may occur. Adverse environmental conditions may reduce the selectivity on the turfgrass. Do not apply this product to stressed turf.
- Certain spray tank additives (adjuvants, wetting agents, surfactants), liquid fertilizers, and tank mixtures containing emulsifiable concentrates may reduce the selectivity on the turfgrass. Do not use adjuvants and spray additive tank-mix combinations, unless your experience indicates that the tank mixture will not result in turf injury.

When an adjuvant is used with this product,

#### Prohibitions:

- Do not apply this product to St. Augustinegrass, bentgrass, greens or tees, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- Do not broadcast apply this product when temperatures are above 90°F, some injury may be expected with spot treatments when air temperatures exceed 90°F. Where state, county or local governments have more stringent temperature regulations, these regulations must be observed.
- To avoid turf injury, use only on turfgrass that is reasonably free of stress from diseases, insects, excess heat or cold, drought or excess rainfall/irrigation, shaded areas, nematodes, improper mowing or improper applications of fertilizer and pesticides. Injury can occur if this product is applied under any of these or other stress conditions. Under any of these stress conditions, any turf damage caused by the use of this product is beyond the control of the registrant and all risk is assumed by the buyer and/or user.
- Do not apply product to bare ground.
- For ground application only; aerial applications are not permitted.

#### STATE RESTRICTIONS:

- California: Make broadcast applications only between March 1 and September 1. If troublesome weeds appear during other times of the year, a spot application can be

made. While irrigation is necessary and important for plant growth, apply irrigation water efficiently so that no more than 125% of the net irrigation requirement is applied for any irrigation event. Apply efficient irrigations for six months following application of sulfentrazone containing products.

- Arizona: The state of Arizona has not approved this product for use on sod farms.

### Application Schedules

Apply this product to broadleaf weeds that are young and actively growing for the best results. Fall applications can provide improved control for emerged winter annuals and perennials such as henbit, chickweed, clover and ground ivy.

For the Listed Residential/domestic sites, Ornamental Turf sites, Institutional sites and Agricultural sites:

Do not apply more than 2 broadcast treatments of this product per site per year. A second broadcast application or a follow-up application as a spot treatment is recommended for more mature weeds, for dense infestations, and for adverse environmental conditions.

Spot treatments during the summer may be appropriate for sparse infestations, or as a follow-up treatment, or any time broadleaf weeds are actively growing.

For the Listed Non-cropland sites:

Use only one (a single) broadcast treatment of this product per site per year for woody plant infestations, or two broadcast treatments for annual and perennial weeds. It is required to wait 30 days between treatments. A spot treatment may be substituted for the second broadcast treatment if necessary.

Extremes in environmental conditions e.g. temperature and moisture, soil conditions, and cultural practices may affect the activity of this product.

Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms is delayed, and weeds hardened off by drought are less susceptible to this product.

For newly seeded areas:

Delay application of this product to grass seedlings until after the second mowing.

For newly sodded, sprigged, or plugged areas:

The application of this product to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations.

Reseeding interval:

Treated areas may be reseeded 3 weeks after application.

How Much To Use

USE RATES AND SPRAY VOLUMES:

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds hardened off or more mature.

SPOT TREATMENT:

WITH HAND OPERATED SPRAYERS (INCLUDING BACKPACK SPRAYERS AND PUMP-UP TYPE SPRAYERS):

- Apply any time the emerged broadleaf weeds are actively growing.
- Calibration and proper application are essential when using this product.
- Uniform applications are essential when using this product. Over application or rates above those specified on the label including excessive overlaps of this product can cause turf injury.
- Hand-held techniques: Wands fitted with flat fan nozzle tips may be used with the appropriate technique. Flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead, the nozzle should be held stationary at the proper height. Side-to-side motion results in uneven coverage.

- Follow-up applications as spot treatments are recommended for more mature weeds, for dense infestations, and for adverse environmental conditions. Wait 30 days before making a follow-up application.

- For cool-season turfgrass listed in Table 1:

Mix 1.2 to 1.5 fl. oz. of this product per 1 gallon of water for treatment of approximately 1,000 sq. ft. of turfgrass. Apply any time the emerged broadleaf weeds are susceptible.

Limitations, Restrictions, and Exceptions

FOR ORNAMENTAL TURF SITES, NON-CROPLAND AND SOD FARMS

Recommended Spray Volume: 10 to 220 Gallons/Acre (0.25 to 5.0 Gallons/ 1,000 sq. ft.)

Minimum Interval Between Applications: 30 days

Method

[Broadcast/Foliar Ground](#)

[Hand operated sprays](#)

Rates

[field rates 0](#)

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Restricted Entry Interval

48 hours

Timings

[Postemergence \(Weed\)](#)