

CORN - PREEMERGENCE APPLICATIONS

General Information

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Marksman herbicide is a water-dispersible formulation for use in corn, sorghum, or fallow to control annual broadleaf weeds and to suppress perennial broadleaf weeds.

Mode of Action

Marksman contains two active ingredients: dicamba and atrazine. Dicamba is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. Dicamba interferes with the plant's growth hormones (auxins) resulting in death of many broadleaf weeds. Atrazine is absorbed by roots and shoots and controls weeds by inhibiting photosynthesis.

Resistance Management

Dicamba has a low probability of selecting for resistant biotypes. With repeated use, atrazine has selected for resistant biotypes of some weed species. Combining the two herbicides, which are each active in a similar broadleaf weed spectrum, reduces the risk of selecting for resistant biotypes.

Marksman herbicide can be applied pre-emergence or postemergence to actively growing weeds as aerial, broadcast, band, or spot spray applications using water or sprayable fertilizer as a carrier. Sprayable fluid fertilizer as a carrier is not recommended for use after crop emergence. For crop-specific application timing and other details, refer to section VI. Crop-Specific Information.

To avoid uneven spray coverage, Marksman should not be applied during periods of gusty wind or when wind is in excess of 15 mph.

Avoid off-target movement. Use extreme care when applying Marksman to prevent injury to desirable plants and shrubs.

Sensitive Crop Precautions

Marksman may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems, or foliage. These plants are most sensitive to Marksman during their development or growing stage.

Aerial Application

Water Volume: Use 2-10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Make applications at the lowest safe height to reduce the exposure of spray droplets to evaporation and wind.

Ground Application (Banding)

When applying Marksman herbicide by banding, determine the amount of herbicide and water volume needed.

Ground Application (Broadcast)

Water Volume: Use 10-50 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

Limitations, Restrictions, and Exceptions

Corn (Field, Pop, Seed, and Silage)

Corn may be harvested or grazed for feed after it has reached the ensilage (milk) stage or later in maturity.

Direct contact of Marksman herbicide with corn seed must be avoided in preplant or pre-emergence applications. If corn seeds are less than 1.5" below the soil surface, delay application until corn has emerged.

Do not apply Marksman to seed corn or popcorn without first verifying with your

local seed corn company (supplier) the selectivity of Marksman on your inbred line or variety of popcorn. This precaution will help avoid potential injury of sensitive varieties.

Marksman is not registered for use on sweet corn.

Avoid using crop oil concentrates after crop emergence as crop injury may result. Use crop oil concentrates only in dry conditions when corn is less than 5" tall and when applying Marksman alone or tank mixed with atrazine.

For field corn forage uses, a 60-day PHI is required.

Postemergence applications to corn must be made before crop reaches 12 inches in height.

Maximum broadcast application rates for corn must be as follows:

- If no atrazine was applied prior to corn emergence, apply a maximum of 2.0 lbs. of atrazine a.i./A broadcast. If postemergence treatment is required following an earlier herbicide application, the total atrazine applied may not exceed 2.5 lbs. a.i./A per calendar year.
- Apply a maximum of 2.0 lbs. of atrazine a.i./A as a single preemergence application on soils that are not highly erodible or on highly erodible soils (as defined by the Natural Resource Conservation Service) if at least 30% of the surface is covered with plant residues; or
- Apply a maximum of 1.6 lbs. of atrazine a.i./A as a single preemergence application on highly erodible soils (as defined by the Natural Resource Conservation Service) if <30% of the surface is covered with plant residues; or 2.0 lbs. of atrazine a.i./A if only applied postemergence.

PREPLANT AND PRE-EMERGENCE APPLICATION IN NO TILLAGE CORN:

Use 2 pints per acre on coarse soils (sand, loamy sand, and sandy loam) or medium and fine textured soils with less than 2.5% organic matter. Avoid use of Marksman in well-drained loamy sand to sand soils, particularly in areas having high groundwater tables.

Marksman may be applied for burndown of emerged weeds before, during, or after

corn planting. When planting into a legume sod (e.g., alfalfa or clover), apply Marksman after 4-6" of regrowth has occurred.

PRE-EMERGENCE APPLICATION IN CONVENTIONAL OR REDUCED TILLAGE CORN:

Marksman may be applied after planting and prior to corn emergence.

Do not apply to coarse-textured soils (sand, loamy sand, or sandy loam) or any soil with less than 2.5% organic matter until after corn emergence (see Early Postemergence uses below).

Pre-emergence application of Marksman does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrate treated soil over seed furrow, as seed damage could result.

2 pints / acre - on coarse or medium and fine textured soils with less than 2.5% organic matter

3.5 pints / acre - on medium- or fine-textured soils containing 2.5% or greater organic matter

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Band](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Band](#)

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Band](#)

Rates

[field_rates 0](#)

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Restricted Entry Interval

24 hours

Exception: If the product is soil injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Soils

[Coarse](#)

[Sandy Loam](#)

[Medium](#)

[Loam](#)

[Fine](#)

[Sand](#)

Tillages

[Conventional](#)

[Fallow/Reduced](#)

[No-Tillage](#)

Timings

[Preemergence \(Crop\)](#)

[Preplant](#)

[Postplant](#)