SUNFLOWER - ANNUAL WEEDS

General Information

Restrictions

- Maximum seasonal application rate - Refer to the Use-specific Information section of the label.

- Preharvest interval (PHI) - Refer to the Use-specific Information section of the label.

- DO NOT apply preplant or preemergence before planting grass crops except field corn. Refer to Use-specific Information.

- DO NOT plant harvestable crops for 30 days after application unless sethoxydim is labeled for use on that crop.

- Avoid all direct or indirect contact with any desired grass crop (e.g., corn, rice, small grains, sorghum, and ornamental grasses and turfgrass).

- Stress - DO NOT apply to grass weeds or crops under stress because of lack of moisture, hail damage, flooding, herbicide injury, mechanical injury, or widely fluctuating temperatures. Unsatisfactory control may result. In irrigated areas, it may be necessary to irrigate before application to ensure active grass weed growth.

- DO NOT apply to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications because this injury may be enhanced or prolonged with new or additional herbicide application.

- A minimum of 14 days is required between sequential applications of Poast.

- DO NOT use selective application equipment such as recirculating sprayers, wiper applicators, or shielded applicators.

- DO NOT apply through any type of irrigation equipment.

- Rainfast period - Poast is rainfast 1 hour after application.

Product Information

Poast herbicide is a broad-spectrum, postemergence herbicide for selective control
of annual and perennial grass weeds listed in Table 1. Poast does not control sedges or broadleaf weeds. Refer to Table 2 for crops and other use sites to which Poast can be applied.

Mode of Action
Poast herbicide affects lipid synthesis by inhibition of Acetyl CoA Carboxylase (ACCase) in plants. It belongs to herbicide mode-of-action Group 1. Lipids are an important component in cell division and plant growth. If plant cells cannot divide, the plant will die.

Poast rapidly enters the target grass weed through its foliage and moves throughout the plant. Effects range from slowing or stopping growth (typically within 2 days) to foliage reddening and leaf tip burn. Foliage burnback may occur later. Symptoms are typically observed within 3 weeks of application of Poast, depending on environmental conditions.

Crop Tolerance
All crops listed on this label are tolerant to Poast at all stages of growth.

Herbicide Resistance
Repeated use of Poast or other Group 1 herbicides may lead to the selection of naturally occurring grass weed biotypes with resistance to Group 1 herbicides. If poor herbicide performance cannot be attributed to adverse weather conditions or improper application methods, a resistant biotype may be present. Consult your local BASF Corporation representative or Cooperative Extension agent for assistance.

While weed resistance to Group 1 herbicides are relatively infrequent, populations of resistant biotypes are known to exist. The frequency of resistant biotypes may increase if Group 1 herbicides are used repeatedly in the same field or in successive years as the primary control of the targeted species. If resistant biotypes dominate the weed population, it may result in partial or total loss of control by other Group 1 herbicides. Weeds resistant to Group 1 herbicides may be effectively managed using herbicide(s) from a different group. Proper stewardship practices should be employed to ensure the long-term effectiveness of Poast.

To aid in the prevention of developing resistant weeds, the following herbicide resistance management principles should be followed where practical:
- Resistance management should be part of a diversified weed control strategy that integrates chemical, cultural, and mechanical (tillage) control tactics. Cultural control tactics include crop rotation, proper fertilizer placement, and optimum seeding rate/row spacing. Start with clean fields using tillage or an effective burndown herbicide program. These practices encourage crop growth and improve competitiveness against weeds.

- Clean equipment before moving to a different field to avoid spread of resistant weeds.

- Scout fields before application to ensure herbicides and rates will be appropriate for the weeds species and weed sizes present.

- Always follow labeled application rate and weed growth stage specifications.

- Use sequential programs with preemergence herbicides that provide soil residual control of weeds to reduce early season weed competition and allow for timely in-crop postemergence herbicide applications.

- DO NOT rely on a single herbicide site of action for weed control during the growing season.

- Avoid application of herbicides with the same site of action more than twice a season.

- Use tank mixes or premixes with other herbicides possessing different sites of action that are also effective on the target weeds.

- Scout fields after herbicide application to identify areas where weed control was ineffective. Control weed escapes with herbicides possessing a different site of action or use a mechanical control measure. Weed escapes should not be allowed to reproduce by seed or to proliferate vegetatively.

- Contact your Poast supplier and/or your local BASF representative to report weed escapes.
- Consult your local BASF representative, local or state cooperative extension service, professional consultants or crop advisors, or other qualified authority to determine appropriate actions if you suspect resistant weeds.

- Suspected herbicide-resistance weeds may be identified by these indicators:

- failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;

- a spreading patch on non-controlled plants of a particular weed species; and

- surviving plants mixed with controlled individuals of the same species.

Cultivation
DO NOT cultivate within 5 days before or 7 days after applying Poast. Cultivating 7 days or more after application may help provide season-long weed control.

Additives
To achieve consistent postemergence grass weed control with Poast, always use a crop oil concentrate (COC) or methylated/modified seed oil (MSO) as directed in Table 3. In addition, ammonium sulfate (AMS) or urea ammonium nitrate (UAN) will enhance activity on certain grass weed species in certain crops (refer to the Use-specific Information section).

NOTE: Using Poast with adjuvants at temperature above 90° F (or anytime the temperature exceeds 100° F regardless of the humidity) and relative humidity at or above 60% may result in injury to many vegetable crops.

Consult your BASF Corporation representative or Cooperative Extension agent for more information on the use of additives.

Crop Oil Concentrate or Methylated Seed Oil
COC or MSO must contain either a petroleum-oil or vegetable-oil base and meet all of the following criteria. (NOTE: Highly refined vegetable oils mix better than unrefined vegetable oils.)

- Contain emulsifiers

- Contain only EPA-exempt ingredients
- Be nonphytotoxic
- Provide good mixing quality in the compatibility jar test
- Show success in local use/experience

Nitrogen Source
Add nitrogen to COC or MSO to improve grass weed control for species as listed in Table 4, Table 5, and Table 6.

Urea Ammonium Nitrate
(28%, 30%, or 32% nitrogen solution)
- UAN may be used in addition to COC to improve grass weed control.
- DO NOT use brass or aluminum nozzles when spraying UAN.

Ammonium Sulfate
- AMS may be substituted for UAN.
- When liquid AMS is used, substitute 3.0 quarts of 8-8-0 analysis for 2.5 pounds of dry AMS.
- Use high-quality AMS (i.e., spray grade) to avoid plugging spray nozzles. Other sources of nitrogen are not as effective.
- If AMS is added directly to the spray tank, add it slowly while agitating. Adding AMS too quickly may clog outlet lines. Ensure AMS is completely dissolved before adding any other products.
- AMS, if applied at less than 10 gallons per acre, may cause potential precipitation and clogging.

NOTE: Because most nitrogen solutions are mildly corrosive to galvanized, mild steel, and brass spray equipment, rinse the entire spray system with water soon after use.

Regional Descriptions
Region 1 (West and High and Rolling Plains)

An area of the western United States, including:

- Western Texas, western Oklahoma, and western Kansas; west of a line running north from Del Rio, Texas, to Gainesville, Texas, and extending along Interstate 35 to the Oklahoma-Kansas border

- West along the Oklahoma-Kansas border to Highway 83

- North to the Kansas-Nebraska border

- West to Colorado, and including all of Colorado to the Continental Divide

- West of the Continental Divide north to the U.S.-Canadian border.

Region 2 (Midwest, South, and Northeast)

All other regions not listed in Region 1.

Application Instructions
Apply Poast herbicide to actively growing grass weeds by aerial or ground application at the rates and timing (maximum height) listed in Table 4 (annual grass weeds), Table 5 (perennial grass weeds), and Table 6 (early and rescue treatments to control select annual grass weeds), as instructed in the Use-specific Information section of this label. For small area application or spot application, refer to Table 7.

NOTE: The most effective control will be achieved by applying postemergence applications of Poast early in the growing season, when grass weeds are small. Poast may not be effective on grass weeds that have grown taller than the maximum heights listed.

Apply Poast to the foliage of grass weeds uniformly and completely; large leaf canopies shelter smaller grass weeds and can prevent adequate spray coverage. DO NOT spray to the point of runoff.

Irrigation
In irrigated areas, it may be necessary to irrigate before application of Poast to ensure active grass weed growth.

Cleaning Application Equipment
Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer’s directions, followed by triple rinsing the equipment before and after applying Poast.

Aerial Application Methods and Equipment
The interaction of many equipment-related and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making application decisions. DO NOT apply under circumstances where possible drift to unprotected persons; to food, forage, or other plantings that might be damaged; or to crops that would then be unfit for sale, use, or consumption can occur.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements DO NOT apply to forestry applications, public health uses, or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed 3/4 the length of the fixed wingspan or rotor blade diameter.

2. Nozzles must always point backward parallel with the airstream and never point downward more than 45 degrees.

Where a state has more stringent regulations, they must be observed. The applicator should be familiar with and take into account the information covered in the Spray Drift Reduction Advisory Information section of this label.

Ground Application Methods and Equipment (Broadcast)
- Apply with nozzle height no more than 4 feet above ground or crop canopy.

- DO NOT apply when conditions favor drift from target area or when wind speed is greater than 10 mph.

- DO NOT use selective application equipment such as recirculating sprayers or wiper applicators.
Water Volume. Use 5 to 20 gallons of spray solution per acre. In Region 1 (the West and High and Rolling Plains Region; refer to Regional Descriptions), DO NOT use less than 10 gallons of spray solution per acre.

Spray Pressure. Use 40 to 60 PSI (measured at the boom, not at the pump or in the line). When crop foliage and grass weed foliage are dense, use a maximum of 20 gallons of water per acre and 60 PSI.

Application Equipment. Use standard high-pressure pesticide flat fan or hollow cone nozzles spaced up to 20 inches apart. DO NOT use flood, whirl chamber, or controlled droplet applicator nozzles because erratic coverage can cause inconsistent grass weed control. To control tall grass weeds, such as volunteer corn, the boom should be high enough to cover the entire plant. Refer to the nozzle manufacturer’s directions for recommended height. When a crop, such as cotton, is 24 inches or taller and the grass weeds are below the crop canopy, use drop nozzles to ensure good coverage of grass weeds.

Ground Application Methods and Equipment (Banding)

- Poast herbicide may be applied by banding to control annual grass weeds.
- DO NOT make banding applications to control perennial grass weeds.
- For banding applications, follow the directions in the Ground Application Methods and Equipment (Broadcast) section of this label.

Small Area Application or Spot Application

- DO NOT make small area application or spot application in addition to broadcast or banding applications on the same area.
- When using knapsack sprayers or high-volume spray equipment with handguns or other suitable nozzle arrangements, prepare a 1.0% to 1.5% spray solution of Poast herbicide in water unless otherwise directed in the Use-specific Information section of this label.
- Use a concentration of 1% crop oil concentrate (COC) or methylated seed oil (MSO). Prepare the desired volume of spray solution by mixing the amount of Poast and the amount of COC or MSO in water according to Table 7.

Crops Grown for Seed

Poast can be used on all crops listed in this label when they are grown for seed production. Use the rate indicated for the crop, as detailed in this Use-specific Information section. Slight modifications in application methods may be required for certain seed crops because of crop canopy or different cultural methods from the corresponding crop.

Wildlife Food Plots

Poast can be used on all crops listed in this label for the purpose of establishing and maintaining wildlife food plots. Use the rate indicated for the crop and follow all associated restrictions and limitations, as detailed in this Use-specific Information section.

Limitations, Restrictions, and Exceptions

Sunflower

- PHI - 70 days

- Maximum Single Application Rate - 2.5 pints/acre

- Maximum Seasonal Application Rate - 2.5 pints/acre

- DO NOT allow livestock to graze or feed treated field. DO NOT feed livestock anything from treated field.

EXCEPTION: Processed meal and soapstock may be fed to livestock.

- Aerial and ground application allowed.

To control crabgrass, shattercane, volunteer corn and all volunteer cereals, and witchgrass, add 2.5 pounds of AMS or 4.0 to 8.0 pints of UAN.

Commercially released varieties of sunflower are tolerant to Poast herbicide at all stages of growth. DO NOT use Poast on sunflower inbred lines grown for seed. NOTE: Leaf speckling occasionally has been observed with no corresponding
reduction in vigor or growth.

Method
- Broadcast/Foliar Air
- Broadcast/Foliar Ground

Pre-Harvest Interval
- 70 days

Restricted Entry Interval
- 12 hours

Timings
- Postemergence (Weed)