

FIELD CORN - CORN PREEMERGENCE

General Information

PRODUCT INFORMATION

INSTIGATE herbicide must be used only in accordance with instructions on this label or in supplemental DuPont publications. DuPont will not be responsible for losses or damage resulting from use of this product in any manner not specifically specified by DuPont.

INSTIGATE herbicide is a water dispersible blend containing 45.8% active ingredients by weight.

INSTIGATE is a selective herbicide for burndown and residual control of certain annual grass and broadleaf weeds.

INSTIGATE can be tank mixed with a variety of corn herbicides to improve burndown and residual control.

INSTIGATE is a blend of rimsulfuron and mesotrione, two active ingredients that have different mode-of-action on susceptible weeds.

When surface applied, rainfall or sprinkler irrigation is needed to move INSTIGATE into the soil root zone.

INSTIGATE is absorbed through the roots, rapidly inhibiting plant growth. Susceptible weeds will generally not emerge from preemergence application. In some cases susceptible weeds may germinate and emerge a few days after application, but growth then ceases and leaves become chlorotic three to five days after emergence. Death of leaf tissue and growing point will follow in some species, while others will remain green but stunted and noncompetitive. Dry conditions following application may reduce the preemergence activity of INSTIGATE. If an activating rain (0.5 inches) is not received within 5-7 days after preemergence application, where appropriate, rotary hoeing is suggested to activate the herbicide.

When applied to emerged vegetation, susceptible weeds take up the herbicide through the treated foliage and cease growth soon after application. Complete death of susceptible weeds may take up to 2 weeks.

On all field corn hybrids, DuPont INSTIGATE can be used in a planned sequential application herbicide program such as INSTIGATE followed by an in-crop application of DuPont ACCENT Q, DuPont REALM Q, DuPont RESOLVE Q, DuPont REVULIN Q or DuPont STEADFAST Q with appropriate tank mix partners not exceeding 1.0 ounce

active ingredient rimsulfuron or 3.85 ounces active ingredient of mesotrione during the crop year.

For glyphosate-tolerant field corn hybrids, INSTIGATE can be followed by an in-crop application of a glyphosate product, such as DuPont ABUNDIT brands, with appropriate tank mix partners and adjuvant products.

Refer to the label of the respective sequential partner for specific use directions.

RESTRICTIONS

Do not make more than 1 application of INSTIGATE per year.

Do not apply to corn grown for seed, popcorn, ornamental (Indian) corn, or sweet corn.

Do not apply another solo HPPD inhibitor postemergence herbicide such as "Callisto", "Impact" or "Laudis" to ground that has been treated with INSTIGATE in the same season.

Do not apply preemergence to coarse-textured soils (sand, loamy sand or sandy loam) with less than 1% organic matter.

Do not apply more than 3.85 ounces active ingredient of mesotrione in a year. This includes combinations of preemergence applications of INSTIGATE, as well as mesotrione from application(s) of products such as REALM Q or REVULIN Q. Do not make the second application of a mesotrione containing product within 14 days of the first application.

Do not apply more than a total of 1.0 ounce active ingredient rimsulfuron during the crop year. This includes combinations of preemergence applications of INSTIGATE, as well as rimsulfuron from application(s) of products such as DuPont BASIS Blend, DuPont LEADOFF, DuPont PREQUEL, DuPont RESOLVE Q, REALM Q or DuPont STEADFAST Q.

Do not tank mix INSTIGATE with "Basagran" or severe crop injury may occur.

Do not tank mix INSTIGATE with foliar-applied organophosphate or carbamate insecticides such as chlorpyrifos ("Lorsban"), malathion, parathion, etc, as severe crop injury may occur. To avoid crop injury or antagonism, apply these products at least seven days before or 3 days after the application of INSTIGATE.

Do not apply the organophosphate insecticide, terbufos ("Counter") within 45 days of a preemergence or preplant application of INSTIGATE since crop injury may result.

Do not apply INSTIGATE within 45 days of crop emergence where the organophosphate insecticide, terbufos ("Counter") was applied as a treatment since crop injury may occur.

Do not irrigate INSTIGATE herbicide into coarse soils at planting time when soils are

saturated.

Do not apply this product through any type of irrigation system.

Do not use aerial application to apply INSTIGATE unless specified otherwise under the specific crop section on the label.

Do not apply with suspension fertilizers as the carrier, unless specifically addressed under one of the tank mix sections of this label or other product labels containing mesotrione, or injury may occur.

Do not graze, feed forage, grain or fodder (stover) from treated areas to livestock within 45 days of INSTIGATE application.

Injury or loss of desirable trees or vegetation may result from failure to observe the following:

- Do not apply INSTIGATE or drain or flush application equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.
- Do not contaminate any body of water.

PRECAUTIONS

Allow at least 4 weeks between preemergence application of INSTIGATE and postemergence applications of unsafened rimsulfuron-containing herbicides.

INSTIGATE herbicide may interact with certain insecticides previously applied to the crop. Crop response varies with field corn type, insecticide used, insecticide application method, and soil type.

Preplant/Preemergence applications of INSTIGATE to corn where an application of "Counter", "Lorsban", or "Thimet" is planned may cause unacceptable crop injury, especially on soils of less than 4% organic matter.

INSTIGATE may be applied to corn previously treated with Fortress, SmartChoice, Aztec, or Force insecticides, or other non-organophosphate soil insecticides regardless of soil type.

INSTIGATE may be applied with pyrethroid type insecticides such as "Asana" or "Warrior" or with diamide type insecticides such as DuPont PREVATHON.

When weeds are stressed due to drought, heat, lack of fertility, flooding, or prolonged cool temperatures, control can be reduced or delayed since the weeds are not actively growing.

Weed escapes or regrowth may occur when application is made under prolonged stress conditions. Optimum weed control will be obtained if an application of DuPont

INSTIGATE is made following label direction when weeds are actively growing. Crop injury may occur following an application of INSTIGATE if there is a prolonged period of cold weather and/or in conjunction with wet soils. Prevent drift or spray onto desirable plants. Thoroughly clean application equipment immediately after use.

RESISTANCE MANAGEMENT

INSTIGATE, which contains the active ingredients rimsulfuron and mesotrione, is both a Group 2 and a Group 27 herbicide based on the mode of action classification system of the Weed Science Society of America.

When herbicides with mode of action classifications that affect the same biological sites of action are used repeatedly over several years to control the same weed species in the same treatment area, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that area. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different biological site of action.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it may be necessary to change cultural practices (within and between crop seasons) such as (using a combination of tillage,) retreatment, tank-mix partners and/or sequential herbicide applications that affect a different site of action. Weed escapes that are allowed to go to seed, and movement of plant material between treatment areas on equipment will promote the spread of resistant biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative to determine appropriate actions for treating specific resistant weed biotypes in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other

qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

APPLICATION INFORMATION - Field Corn Grown for Grain or Silage

INSTIGATE herbicide may be used in either conventional, conservation tillage, or no-till crop management systems and may be applied either preplant, preplant incorporated (less than 2" deep), preemergence, or early postemergence to field corn. INSTIGATE herbicide can be applied to corn that exhibits up through 2 leaf collars.

APPLICATION TIMINGS

Preplant Surface-Applied or Preplant Incorporated: INSTIGATE herbicide may be up to 14 days applied prior to planting. For preplant incorporated treatments apply to the soil and uniformly incorporate in the top two inches of soil before planting using a finishing disc harrow, field cultivator or similar implement capable of providing uniform two inch incorporation. Do not incorporate INSTIGATE deeper than 2" or weed control may be reduced.

Preplant/Preemerge Burndown: INSTIGATE may be applied when weeds are present at the time of treatment. The addition of crop oil concentrate or methylated seed oil is recommended for burndown of labeled weeds 3 inches or less in height. When weeds are greater than 3" in height or weeds not controlled by INSTIGATE herbicide are present, the addition of a burndown herbicide (e.g. paraquat, glyphosate such as DuPont ABUNDIT brands, dicamba and/or 2,4-D) is recommended. If giant ragweed, common cocklebur, henbit, Pennsylvania smartweed or purple deadnettle are present at the time of application, the addition of atrazine, or atrazine-containing herbicides will improve control. Observe directions for use and precautions and restrictions on the label of the burndown label herbicide. When mixing with liquid nitrogen fertilizer or glyphosate, substitute a non-ionic surfactant for crop oil concentrate. When tank mixing with EC formulation herbicides, such as DuPont CINCH or DuPont BREAKFREE brands, refer to TANK MIXING section for additional adjuvant information.

Preemergence: Apply INSTIGATE herbicide during planting (behind the planter after furrow closure) or after planting, but before crop emergence. Failure to thoroughly close and firm the seed furrow may allow herbicide to directly contact the seed which can cause injury.

Early Postemergence Treatment: In the event planned preemergence applications are delayed and corn is emerging, application may be made to emerged corn up through 2 collars. Use only clean water as the carrier when applying DuPont INSTIGATE after corn emergence.

For control of labeled emerged weeds, applications of INSTIGATE must include a crop oil concentrate or a nonionic surfactant. In addition, nitrogen based adjuvant (UAN or AMS) must be used unless specifically prohibited by tank mix partner labeling. Crop oil concentrate plus nitrogen based adjuvant is the preferred adjuvant system for INSTIGATE for control of labeled emerged weeds. When applied in tank mix combination with a glyphosate that contains a built-in adjuvant, ensure the total adjuvant load is equivalent to the recommendations on this label. Select adjuvants authorized for use with both products.

Best results are obtained when applications are made to actively growing plants. INSTIGATE is rainfast 1 hour after application.

Do not use with spray additives that alter the pH of the spray solution below 5.0 or above 9.0 as rapid product degradation can occur. Spray solutions of pH 6.0 - 8.0 allow for optimum stability of INSTIGATE.

WEEDS CONTROLLED

Additional weeds may be controlled with tank mixes. See the TANK MIXTURES section for recommended tank mix combinations.

Limitations, Restrictions, and Exceptions

APPLICATION RATE

INSTIGATE may be applied within a rate range of 5.25 - 7.0 oz product per acre before corn emergence. Use higher rates on fine soils (silty clay loam, clay loam, sandy clay, silty clay or clay) or on soils with greater than 3% organic matter. Do not apply to coarse soils (sand, loamy sandy or sandy loam) with less than 1% organic matter. See cumulative rimsulfuron and mesotrione rate limitations noted under "Restrictions".

Method

[Broadcast/Foliar Ground](#)

Rates

[field rates 0](#)

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Restricted Entry Interval

12 hours

Tillages

[Conventional](#)

[No-Tillage](#)

[Conservation](#)

Timings

[Preemergence \(Crop\)](#)