12/12/2012





## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

DEC 1 2 2012

Geraldine Meunier
Bayer Environmental Science
P.O. Box 12014
Research Triangle Park, NC 27709

Subject:

Label Amendment

Indaziflam 74SC

EPA Reg. No. 432-1518

Application Dated September 27 2012

Dear Ms. Meunier:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

A stamped copy of your label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products released for shipment after eighteen (18) months from the date of this letter must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

If you have any questions, please contact Mindy Ondish at (703)605-0723 or at ondish.mindy@epa.gov.

Sincerely.

Mandy andth, for

Kable Bo Davis Product Manager 25 Herbicide Branch Registration Division (7505P)

**GROUP** 

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**HERBICIDE** 

# **INDAZIFLAM 74SC**

## (ABN: SPECTICLE FLO; SPECTICLE O; MARENGO)

Pre-emergent Herbicide for the Control of Annual Grasses, Annual Sedges, and Annual Broadleaf Weeds in Warm Season Turfgrass, Landscape and Production Ornamentals, Hedgerows, Conifers, Christmas Trees, Greenhouse Floors, Ornamental Production Sites, and Hardscapes

### DO NOT USE FOR THE MANUFACTURING OF FERTILIZER

| ACTIVE INGREDIENT: | 7 40/ |
|--------------------|-------|
|                    |       |
|                    |       |

Contains 0.622 lbs active ingredient per gallon

EPA Reg. No. 432-1518

**EPA Est.** 

## **KEEP OUT OF REACH OF CHILDREN**

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

#### **FIRST AID**

| If swallowed:           | Call a poison control center or doctor immediately for treatment advice.                                                           |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| •                       | Have person sip a glass of water if able to swallow.                                                                               |
| 4                       | Do not induce vomiting unless told to do so by a poison control center or doctor.                                                  |
|                         | Do not give anything to an unconscious person.                                                                                     |
| If in eyes:             | Hold eyes open and rinse slowly and gently with water for 15-20 minutes.                                                           |
|                         | Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing.                                           |
| <u> </u>                | Call a poison control center or doctor for treatment advice.                                                                       |
| If on skin or clothing: | Take off contaminated clothing.                                                                                                    |
|                         | Rinse skin immediately with plenty of water for 15-20 minutes.                                                                     |
|                         | Call a poison control center or doctor for treatment advice.                                                                       |
| If inhaled:             | Move person to fresh air.                                                                                                          |
|                         | If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. |
|                         | Call a poison control center or doctor for further treatment advice.                                                               |
| Have the product co     | ontainer or label with you when calling a poison control center or doctor or going for treatment.                                  |

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear long-sleeved shirt and long pants, and shoes plus socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROLS STATEMENTS:**

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## **User Safety Recommendations**

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash body thoroughly and put on clean clothing.

#### **ENVIRONMENTAL HAZARDS**

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of equipment rinsate or washwater. This product may enter water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential for getting into water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

This product may enter water through drift of spray in wind. Follow precautions for use to avoid wind spray drift.

Surface Water Advisory: This pesticide may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is coveralls, waterproof gloves and shoes plus socks.

## **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of the treated areas until sprays have dried.

#### PRODUCT INFORMATION

INDAZIFLAM 74SC is a selective, pre-emergent alkylazine herbicide. INDAZIFLAM 74SC provides extended residual control of many annual grasses including crabgrass, goosegrass, and annual bluegrass, as well as annual sedges, and broadleaf weeds in turf, landscape ornamentals, production nursery including in-ground and pot-in-pot container grown ornamentals, conifers and Christmas trees, non-bearing fruit and nut trees in nurseries and residential plantings, greenhouse floors (under benches), ornamental production facilities (such as shadehouses, hoophouses, and lathhouses), and hardscapes. INDAZIFLAM 74SC also demonstrates limited early post-emergent activity against some weeds, including annual bluegrass, crabgrass and oxalis.

INDAZIFLAM 74SC is also used only on established warm season turf in areas including golf courses (roughs and fairways), sod farms, sports fields, residential and commercial lawns, parks, and cemeteries.

INDAZIFLAM 74SC controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB Inhibitor). Necrosis or chlorosis may be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems of susceptible plants including sensitive ornamentals. INDAZIFLAM 74SC does not control plants emerging from tubers, rhizomes, bulbs, corms, existing rootstocks, and woody vegetation.

INDAZIFLAM 74SC needs to be activated prior to weed germination for most effective control. For maximum activity against germinating weeds, INDAZIFLAM 74SC requires rainfall or irrigation prior to weed germination.

INDAZIFLAM 74SC is a highly active herbicide that provides effective weed control when applied to the soil around many field grown woody ornamentals. INDAZIFLAM 74SC may damage sensitive plants, if the product is allowed to remain in contact with foliage. Carefully apply INDAZIFLAM 74SC in strict accordance to the label. Be sure to follow all label restrictions.

#### PRODUCT USE RESTRICTIONS

- Do not exceed the maximum single application rates specified under each use.
- Do not exceed 18.5 fl oz per acre of INDAZIFLAM 74SC for all applications within a 12 month period.
- Do not contaminate water intended for irrigation and domestic use.
- Do not apply within 25 feet of ponds, lakes, rivers, streams, wetlands, and habitat containing aquatic and semi-aquatic plants when INDAZIFLAM 74SC is used on sod farms, golf courses, production nurseries, and non-crop areas (excluding lawns).
- Do not apply INDAZIFLAM 74SC through an irrigation or chemigation system.
- Do not apply INDAZIFLAM 74SC by air.
- Follow use precautions and restrictions on this label and for all tank-mix partners, if mixing INDAZIFLAM 74SC with other pesticides.
- INDAZIFLAM 74SC is not for sale, distribution, or use in Nassau County or Suffolk County in New York State.

Not all products are registered in all states; please verify state registration of these products in your state before selling, distributing, or using.

#### **DEACTIVATING INDAZIFLAM 74SC**

Activated charcoal has been shown to deactivate INDAZIFLAM 74SC if applied within several days of application. Application of activated charcoal within 2 weeks of an application of INDAZIFLAM 74SC will not reverse phytotoxic symptoms immediately, but it will aid in recovery over time. If it should be necessary to re-sod areas treated with INDAZIFLAM 74SC, remove damaged turf to a depth of at least 2 inches, cultivate the soil, and apply activated charcoal to bare ground prior to laying sod. Follow directions for the amount of charcoal to apply on the label of the activated charcoal.

#### SPRAY DRIFT MANAGEMENT

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator or grower. To reduce the potential for drift, the application equipment must be set to apply medium to very coarse droplets (i.e., ASAE Standard 572) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

#### Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Do not spray near sensitive plants if wind is gusty, below 2 mph, or in excess of 10 mph and moving in the direction of adjacent areas of sensitive crops or plants. Do not apply during temperature inversions. Always make applications when there is some air movement to determine the direction and distance of possible spray drift.

Local terrain may influence wind patterns; the applicator should be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

#### **Temperature Inversion**

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

#### Sensitive Areas

Sensitive areas to INDAZIFLAM 74SC are defined as bodies of water (ponds, lakes, rivers, and streams), wetlands, habitats for endangered species, and non-labeled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas.

#### Spray Drift Management (Golf Course; Residential and Commercial Lawns):

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. For use on golf courses and commercial lawns, the boom height must be no higher than 1-3 feet above the ground and nozzle tips must be set to spray out medium to very coarse spray droplets. Applications to residential lawns must be made by equipment that maintains coarse spray droplets (to reduce drift).

#### Spray Drift Management (Ornamentals):

Apply INDAZIFLAM 74SC to dormant (prior to bud break) or actively growing plants. In either case, the spray must be directed at the base of the plant or away from the plant. Do not allow INDAZIFLAM 74SC to come in contact with the foliage, as some leaf malformations or discoloration may occur. Minimize contact with above ground stems.

#### Spray Drift Management (Conifers/Christmas Trees):

For Christmas trees and conifers, direct the spray to the base of the trees with a band or with a broadcast application. Do not allow INDAZIFLAM 74SC to come into contact with the foliage.

#### **APPLICATION INFORMATION**

Apply INDAZIFLAM 74SC with a properly calibrated sprayer according to the manufacturer's directions and check periodically to be certain that the equipment is working properly prior to each use. Uniform application is essential for satisfactory weed control. Avoid skips for the best weed control and overlapping application patterns to avoid turf injury.

#### **Application Volume**

Apply INDAZIFLAM 74SC in a minimum of 10 gallons of water per acre (1 quart of water per 1000 sq ft) and ensure adequate coverage for optimum weed control.

#### IRRIGATION AND WATERING AFTER APPLICATION

**INDAZIFLAM 74 SC** will provide residual weed control when adequate moisture is present and the application is followed by rain or irrigation (0.125 to 0.25 inches) within 21 days and prior to weed seed germination. Do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

#### MIXING AND COMPATIBILITY

#### Mixing Instructions

INDAZIFLAM 74SC should be added to the tank and agitated, prior to introduction of another pesticide. Mix the amount of INDAZIFLAM 74SC needed for immediate application needs. Settling can occur if the spray mixture is allowed to sit over an extended period of time. INDAZIFLAM 74SC is stable in spray solution for up to 48 hours after mixing. Re-agitate the spray solution before application.

## **Compatibility Testing With Other Pesticides**

INDAZIFLAM 74SC is generally compatible with many pesticides and liquid fertilizers. A compatibility test should be conducted with any potential tank-mix partner with INDAZIFLAM 74SC. Using a clear container, conduct the test as described below:

- 1. Fill the container three-quarters full with water.
- 2. Add the products to be tank-mixed in the following order: (a) wettable powders (b) dry flowable, (c) aqueous suspensions, (d) INDAZIFLAM 74SC\*, (e) liquids, (f) solutions and emulsifiable liquid concentrates, (g) micronutrients and liquid fertilizers.
- Shake or stir after each addition to mix thoroughly.
- 4. After adding all ingredients, let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels, and heavy oily film or other signs of incompatibility.

5. If the compatibility test shows signs of incompatibility, do not tank-mix the product tested with INDAZIFLAM 74SC.

\*Note that a labeled spray rate for INDAZIFLAM 74SC should be used in any compatibility test. Dilute from a concentrated suspension, or sample from a properly diluted spray solution.

#### SPRAYER CLEANUP PROCEDURE

Spray equipment used to apply INDAZIFLAM 74SC must be cleaned prior to use on sensitive turf and ornamentals, or injury may result. Before and after using INDAZIFLAM 74SC, triple rinse all mixing and spray equipment, including tanks, pumps, lines, filters, screens, and nozzles with a good quality tank cleaner on an approved rinse pad. Proper PPE must be worn while cleaning. Follow the directions below.

For each rinse cycle, complete the following:

- Completely drain the spray and mixing tanks.
- Rinse the spray tank inside and outside including all lines and screens. A rotating cleaning nozzle may be beneficial to dislodge any product from the sides of the tank.
- Fill the tank with water and cleaner.
- Circulate solution to ensure that the pumps, valves, and all lines are flushed.
- · Remove and clean all filters, screens, and nozzles.
- Drain all cleaning solution and then rinse once more with clean water.
- Visually inspect the filters, screens, and tank walls to ensure that no product remains.
- · Dispose of rinsate in an approved way.

#### RESISTANCE MANAGEMENT

INDAZIFLAM 74SC controls weeds by inhibiting cellulose biosynthesis. Cellulose is a component in the formation plant cell walls. INDAZIFLAM 74SC is classified as a Group 29 herbicide. No known resistance to INDAZIFLAM 74SC exists, and there are no known instances of cross-resistance between INDAZIFLAM 74SC and other classes of herbicides or other modes of action. Performance of INDAZIFLAM 74SC is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS inhibitors, mitotic inhibitors, growth regulators, or herbicides with other modes of action. Prolonged use of any herbicide with the same mode of action may lead to selection of resistant weed populations and a reduction in efficacy. Rotation of herbicides with an alternate mode of action can help prevent the development and spread of resistant weed populations. If resistance to INDAZIFLAM 74SC is suspected, use a herbicide with an alternate mode of action. The decision to use a particular herbicide should always be based on an IPM program and involve consideration of all cultural practices and other pesticides in use.

#### DIRECTIONS FOR USE OF INDAZIFLAM 74SC ON TURF

### Use Restrictions for Indaziflam 74SC on Turf

- Do not apply INDAZIFLAM 74SC to newly established turf. (Turf is defined as established at least 16 months after seeding or sprigging.)
- Do not apply INDAZIFLAM 74SC to golf course greens, tees, or collars.

#### USE OF INDAZIFLAM 74 SC ON TURF IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of turf to INDAZIFLAM 74SC. Coarse or sandy soils may allow for downward movement of INDAZIFLAM 74SC into the root zone and cause significant root damage and phytotoxicity. Coarse soils, for example, may include significant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of INDAZIFLAM 74SC in these soils, confirm texture with a soil test. Turf grown in soil exceeding 80 % sand or 20 % gravel may be at risk. Low rate multiple applications of INDAZIFLAM 74SC may reduce the risk on these soils. Refer to use rates for 'Multiple Application Program' of INDAZIFLAM 74SC section of this label.

If INDAZIFLAM 74SC is to be applied on these soils, evaluate treated soils for tolerance prior to a large scale application.

#### Use of INDAZIFLAM 74SC on Weakened or Stressed Turf

Do not apply INDAZIFLAM 74SC to weakened turf that requires significant fill-in or recovery. INDAZIFLAM 74SC controls weeds by inhibiting root development. Newly developing roots of desirable turf may also be affected. Factors, both biotic and abiotic, that weaken or thin turf include winterkill, spring dead spot, transitioning ryegrass, bermudagrass spring root decline, soil compaction, foliar and root diseases, nematodes, salt accumulation, shade, excessive foot or equipment traffic, newly verticut turf, and drought. Application of INDAZIFLAM 74SC to turf in these situations may delay turf recovery. INDAZIFLAM 74SC may be used on dormant turf. The user should assess the condition of turf prior to dormancy.

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INDAZIFLAM 74SC can be used on the following turf types and their cultivars. Before making a large-scale application to a cultivar not listed on this label, treat a small area of turf with INDAZIFLAM 74SC to assess acceptable turf tolerance.

#### Warm season turfgrasses and their cultivars

- Bermudagrass\* (Cynodon dactylon) (and hybrids)-Baby, Celebration, Common, Floatex, GN1, Tifsport, Tifton 10, Tifway 419, Princess. Vamont, Riviera, Yukon
- Zoysiagrass (Zoysia spp.)-Cavalier, Crowne, DeAnza, El Toro, Empire, GNZ, Jamar, Meyer, Palisades, Zenith, Zeon
- Centipedegrass\* (Eremochloa ophiuroides)- Tifblair
- St. Augustinegrass\* (Stenotaphrum secundatum)-Captiva, Floratam, Floratine, Palmetto, Raleigh
- Buffalograss (Buchloe dactyloides)
- Bahiagrass (Paspalum notatum)

\*Application of INDAZIFLAM 74SC may temporarily inhibit the rooting of stolons of bermudagrass, centipedegrass, and St. Augustinegrass.

INDAZIFLAM 74SC may cause unacceptable injury to some turf types. <u>Do not use</u> on the following turf types or on turf that is a mixture containing any of these grasses, unless thinning or removal is desired.

- Creeping bentgrass (Agrostis palustris)
- Colonial bentgrass (Agrostis capillaris)
- Annual bluegrass (Poa annua)
- Roughstalk bluegrass (Poa trivialis)
- Fine fescue (Festuca rubra)
- Turf type tall fescue (Festuca arundinaceae)
- Kikuyuqrass (Pennisetum clandestinum)
- Perennial ryegrass (Lolium perenne)
- Annual ryegrass (Lolium multiflorum)
- Kentucky bluegrass (Poa pratensis)
- Seashore paspalum (Paspalum vaginatum)
- Bermudagrass (Cynodon dactylon)- Ormond

Maximum Single Application Rates for INDAZIFLAM 74SC on Warm Season Grasses

| Turf Type          | Application Rate Fluid Ounces of Product per Acre |  |
|--------------------|---------------------------------------------------|--|
| Bermudagrass       | 10                                                |  |
| Zoysiagrass        | 10                                                |  |
| Buffalograss       | 10                                                |  |
| Bahiagrass         | 10                                                |  |
| St. Augustinegrass | 6                                                 |  |
| Centipedegrass     | 6                                                 |  |

## Precautions for Use of INDAZIFLAM 74SC Near Sensitive Grasses

<u>CAUTION: INDAZIFLAM 74SC can cause turf injury and stand reduction to sensitive grasses listed in the Turf Tolerance section of this label.</u>

- INDAZIFLAM 74SC may affect sensitive grasses downslope from treated areas after excessive rainfall. To minimize off-target
  effects of INDAZIFLAM 74SC on sensitive grasses, irrigate after application as directed in the IRRIGATION AND WATERING
  AFTER APPLICATION section of this label and follow the directions below for specific situations.
- Allow turf to dry before allowing foot traffic or equipment through treated areas near sensitive grasses.

#### PRECAUTIONS AROUND GREENS AND TEES CONTAINING COOL SEASON GRASS

• For applications of INDAZIFLAM 74SC adjacent to bentgrass greens and bermudagrass greens and tees overseeded with roughstalk bluegrass (*Poa trivialis*), perennial ryegrass (*Lolium perenne*) or other cool season grasses, follow the precautions above and provide an untreated buffer zone of at least 15 ft.

 Do not apply INDAZIFLAM 74SC on uphill slopes and adjacent to bentgrass or bermudagrass greens overseeded with cool season grasses such as Poa trivialis.

#### PRECAUTIONS FOR BERMUDAGRASS OVERSEEDED WITH RYEGRASS

• Do not apply INDAZIFLAM 74SC on annual and perennial ryegrass or on bermudagrass overseeded with ryegrass. Provide an untreated buffer zone of at least 15 ft between overseeded bermudagrass and treated areas.

#### PRECAUTIONS FOR USE NEXT TO OTHER SENSITIVE GRASSES

INDAZIFLAM 74SC may be applied in situations where warm season grasses such as bermudagrass are adjacent to sensitive
grasses such as tall fescue and perennial ryegrass. The applicator, however, must take care not to apply INDAZIFLAM 74SC
directly to sensitive grasses or injury may occur. Application of INDAZIFLAM 74SC may be made adjacent to sensitive grasses
such as ryegrass and tall fescue if the grass is established for at least 16 months. Maintain a distance of the length of one
spray boom from the sensitive grass. Do not exceed 8.1 fl oz of INDAZIFLAM 74SC in areas adjacent to sensitive grasses.

#### USE RATES, TIMINGS, AND MAXIMUM SEASONAL RATE FOR INDAZIFLAM 74SC ON TURF

Use 3-10 fl oz per acre of INDAZIFLAM 74SC for weed control in turf. Apply INDAZIFLAM 74SC in a single or multiple application program. The maximum single application rate of INDAZIFLAM 74SC is 10 fl oz per acre. The total amount of INDAZIFLAM 74SC applied in a 12-month period must not exceed 18.5 fl oz per acre.

Factors to consider when deciding between single, split, and multiple application programs include:

- Weeds to be controlled
- Weed pressure
- Turf tolerance
- Length of residual control desired
- Soil texture

- Other herbicides used
- Mowing height
- Turf density
- Turf health

#### SINGLE APPLICATION PROGRAM

Use higher rates within the rate range when the site has historically higher weed pressure and when longer residual control is desired. Use a lower to medium rates on medium and coarse-textured soils, and higher rates on fine-textured soils.

Use Rates for Single Application of INDAZIFLAM 74SC

| Target Weed                      | Rate Range (fl oz per acre) for INDAZIFLAM 74SC (single application) |
|----------------------------------|----------------------------------------------------------------------|
| Crabgrass                        |                                                                      |
| Goosegrass                       | ·                                                                    |
| Annual bluegrass                 | 6-10                                                                 |
| Broadleaf weeds                  |                                                                      |
| Annual sedge and annual kyllinga |                                                                      |

#### SPLIT APPLICATION PROGRAM

For extended residual control, use split applications. Make the follow-up application within 45-90 days of the initial application.

Use Rates for Split Applications of INDAZIFLAM 74SC

| Target Weed                      | Rate Range (fl oz per acre) for INDAZIFLAM 74SC (initial application) | Rate Range (fl oz per acre) for INDAZIFLAM 74SC (follow-up application within 45-90 days) |  |
|----------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------|--|
| Crabgrass                        |                                                                       |                                                                                           |  |
| Goosegrass                       | 4.5-9                                                                 | 3-9                                                                                       |  |
| Annual bluegrass                 | 3-9                                                                   | 3-9                                                                                       |  |
| Broadleaf weeds                  | 6-9                                                                   | 3-9                                                                                       |  |
| Annual sedge and annual kyllinga | 6-9                                                                   | 6-9                                                                                       |  |

#### **MULTIPLE APPLICATION PROGRAM**

For crabgrass, goosegrass and Annual Bluegrass control, a multiple application program may be used. Make the follow-up applications within 30-45 days of each application. Use this program in coarse and sandy soils where risk of phytotoxicity is a concern.

Use Rates for Multiple Applications of INDAZIFLAM 74SC

| Target Weed         | Rate Range (fl oz per acre)<br>for INDAZIFLAM 74SC<br>(initial application) | Rate Range (fl oz per acre)<br>for INDAZIFLAM 74SC<br>(follow-up application<br>within 30-45 days) | Rate Range (fl oz per acre)<br>for INDAZIFLAM 74SC<br>(follow-up application<br>within 30-45 days) |
|---------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Crabgrass           |                                                                             |                                                                                                    |                                                                                                    |
| Goosegrass          | 3-4.5                                                                       | 3-4.5                                                                                              | 3-4.5                                                                                              |
| Annual<br>Bluegrass |                                                                             |                                                                                                    |                                                                                                    |

#### **CRABGRASS CONTROL**

INDAZIFLAM 74SC provides both pre-emergent and early post-emergent control of crabgrass. For early post-emergence control apply INDAZIFLAM 74SC no later than the 1-2 leaf stage of crabgrass, Post-emergent activity of 1-2 leaf crabgrass is increased when INDAZIFLAM 74SC is combined with methylated seed oil (0.5% v/v). Use a minimum of 6 fl oz of INDAZIFLAM 74SC per acre for post-emergent control of 1-2 leaf crabgrass.

#### **GOOSEGRASS CONTROL**

INDAZIFLAM 74SC provides pre-emergent control of goosegrass emerging from seed. INDAZIFLAM 74SC does not control perennial goosegrass (continual growth) or goosegrass emerging from existing crowns. If goosegrass is evident at the time of application, use a labeled post-emergent herbicide for control of existing plants.

#### ANNUAL BLUEGRASS CONTROL

Make pre-emergent applications of INDAZIFLAM 74SC between August and November depending on the germination of annual bluegrass in each geographical zone. The optimum timing is dependent on peak annual bluegrass germination and local conditions in a particular year.

For early post-emergence control apply INDAZIFLAM 74SC prior to tillering. Post-emergent control of tillered annual bluegrass can be achieved by combining INDAZIFLAM 74SC with labeled use rates of REVOLVER® Herbicide or TRIBUTE™ TOTAL. Applications must be made prior to when the ground freezes.

Addition of methylated seed oil (0.5% v/v) will increase post-emergent control.

#### **BROADLEAF WEED CONTROL**

INDAZIFLAM 74SC provides pre-emergent control of many annual broadleaf weeds. Control is affected by the size of the seed, and the depth of the seed within the soil profile. INDAZIFLAM 74SC must be activated by rainfall or irrigation prior to germination. Large seeded broadleaf weeds or weeds germinating deeper in the soil profile may not be effectively controlled by INDAZIFLAM 74SC.

#### ANNUAL SEDGES AND ANNUAL KYLLINGA CONTROL

INDAZIFLAM 74SC provides pre-emergent control of annual types of sedges and kylingas emerging from seed. INDAZIFLAM 74SC does not control established perennial sedges and kyllinga, or sedges emerging from tubers (nutlets) including yellow or purple nutsedge.

#### Tank-Mix Combinations with INDAZIFLAM 74SC on Turf

When tank mixing with other products, it is the responsibility of the end-user/applicator to ensure that the tank-mix partner is registered in the state where the application is being made. Not all products are registered in all states; please verify state registration of tank mixed products in your state before selling, distributing, or using.

### Dormant, Non-Overseeded Turf

Tank-mix combinations of INDAZIFLAM 74SC with a non-selective herbicide such as FINALE® will control existing weeds in dormant warm season grasses such as bermudagrass and zoysiagrass. Applied as a broadcast spray, INDAZIFLAM 74SC with FINALE will provide pre and post-emergent control of susceptible species listed on the respective labels of the two herbicides.

INDAZIFLAM 74SC may be applied in late winter at normal, regionally established timings for pre-emergent herbicides. INDAZIFLAM 74SC may be used in combination with RONSTAR® FLO, REVOLVER, CELSIUS® or TRIBUTE™ TOTAL to provide broad-spectrum residual weed control. Follow use restrictions on all labels.

#### Non-Dormant, Non-Overseeded Turf

IINDAZIFLAM 74SC can not be used on warm season turf overseeded with cool season grasses. Tank-mix combinations of INDAZIFLAM 74SC with a selective post-emergent herbicide such as REVOLVER, CELSIUS, or SENCOR® provide pre and post-emergent control of weeds in non-overseeded, warm season turf common to both products. Follow use restrictions on all labels.

| Broadleaf Weeds              |                          |
|------------------------------|--------------------------|
| American black nightshade    | Solanum americanum       |
| American burnweed (Fireweed) | Erechtites hieraciifolia |
| Bittercress                  | Cardamine sp.            |
| Black medic*                 | Medicago lupulina        |
| Buckwheat, wild              | Polygonum convolvulus    |
| California burclover         | Medicago polymorpha      |
| Canada thistle, Common       | Circium arvense          |
| Chickweed, Common            | Stellaria media          |
| Chickweed, Mouse-ear         | Cerastium vulgatum       |
| Clover, White                | Trifolium repens         |
| Corn speedwell               | Veronica arvensis        |
| Cudweed, Linear-leaf/purple  | Gnaphalium purpureum     |
| Curly dock                   | Rumex crispus            |
| Dandelion, cat's ear         | Hypochoeris radicata     |
| Dandelion, common            | Taraxacum officinale     |
| Eclipta                      | Eclipta alba             |
| Evening primrose, common     | Oenothera biennis        |
| Evening primrose, cutleaf    | Oenothera laciniata      |
| False chamomile*             | Matricaria maritima      |
| Filaree, redstem             | Erodium cicutarium       |
| Florida pusley               | Richardia scabra         |
| Groundsel, common            | Senecio vulgaris         |
| Hairy fleabane               | Erigeron bonariensis     |
| Hairy nightshade             | Solanum sarrachoides     |
| Henbit                       | Lamium amplexicaule      |
| Horseweed/ Marestail         | Conyza canadensis        |
| Kochia                       | Kochia scoparia          |
| Lambsquarters, common        | Chenopodium album        |
| Lawn burweed                 | Soliva sessilis          |
| Little mallow                | Malva parviflora         |
| London rocket*               | Sisymbrium irio          |
| Longstalked phyllanthus      | Phyllanthus tenellus     |
| Mulberry weed                | Fatousa villosa          |
| Mustard, black*              | Brassica nigra           |
| Mustard, wild                | Sinapis arvensis         |
| Parthenium                   | Parthenium hysterophorus |
| Pigweed, Prostrate           | Amaranthus blitoides     |
| Pigweed, redroot             | Amaranthus retroflexus   |
| Plantain, Buckhorn           | Plantago lanceolata      |
| Plantain, Paleseed           | Plantago virginica       |
| Prostrate knotweed           | Polygonum aviculare      |

| Prostrate spurge              | Euphorbia maculate                     |
|-------------------------------|----------------------------------------|
|                               |                                        |
| Puncturevine                  | Tribulus terrestris                    |
| Purslane, common              | Portulaca oleracea                     |
| Ragweed, Common*              | Ambrosia artimisiifolia                |
| Spurge, spotted               | Euphorbia maculate                     |
| Tassel flower                 | Emilia sonchifolia                     |
| Redmaids                      | Calandrinia spp                        |
| Sesbania, Hemp*               | Sesbania exaltata                      |
| Shepherd's-purse              | Capsella bursa-pastoris                |
| Sida, Prickly/Teaweed*        | Sida spinosa                           |
| Southern brassbuttons*        | Cotula australis                       |
| Sowthistle, Annual            | Sonchus oleraceus                      |
| Sunflower*, Common            | Helianthus annuus                      |
| Swinecress                    | Coronopus didymus                      |
| Tropic ageratum               | Ageratum conyzoides                    |
| Velvetleaf*                   | Abutilon theophrasti                   |
| Vetch, Purple*                | Vicia benghalensis                     |
| Wild carrot*                  | Daucus carota                          |
| Willowherb                    | Epilobium brachycarpum                 |
| Woodsorrel, Yellow*           | Oxalis stricta                         |
| Woodsorrel/Oxalis*            | Oxalis sp                              |
|                               |                                        |
| GRASSES, MONOCOTS, AND SEDGES | · · · · · · · · · · · · · · · · · · ·  |
| Annual bluegrass/ 'Poa'       | Poa annua                              |
| Annual kyllinga               | Cyperus sesquiflorus                   |
| Barnyardgrass, common         | Echinochloa crus-galli                 |
| Cheatgrass                    | Bromus secalinus                       |
| Crabgrass                     | Digitaria sp                           |
| Crabgrass, Henry              | Digitaria ciliaris                     |
| Crabgrass, Large/Hairy        | Digitaria sanguinalis                  |
| Crabgrass, Smooth             | Digitaria ischaemum                    |
| Doveweed                      | Murdannia nudiflora                    |
| Foxtail brome                 | Bromus rubens                          |
| Foxtail, Giant                | Setaria faberi                         |
| Foxtail, Green                | Setaria viridis                        |
| Foxtail, Yellow               | Pennisetum glaucum                     |
| Goosegrass                    | Eleusine indica                        |
| Guineagrass                   | Panicum maximum                        |
| Kyllinga, Fraqrant/Annual     | Kyllinga odorata                       |
| Mouse barley                  | Hordeum murinum                        |
| Nutsedge, Purple*             | Cyperus rotundus                       |
| Nutsedge, Yellow*             | Cyperus esculentus                     |
| Red brome                     | Bromus rubens                          |
| Rice flatsedge                | Cyperus iria                           |
| Ryegrass, Italian             | Lolium multiflorum                     |
|                               |                                        |
| Ryegrass, Perennial           | Lolium perenne                         |
|                               | Lolium perenne<br>Cenchrus longispinus |
| Ryegrass, Perennial           |                                        |

<sup>\*</sup> Weeds suppressed by INDAZIFLAM 74SC

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\*\*Higher labeled rates should be used if weed pressure is historically high or longer residual control is desired (See Use Rates in the INDAZIFLAM 74SC chart). The rate chosen should not exceed the tolerance for an individual turf type. Weed control can also be achieved with multiple applications of INDAZIFLAM 74SC. Do not exceed a total of 18.5 fl oz per acre per year with multiple applications.

\*\*\*INDAZIFLAM 74SC only controls sedges and annual kyllinga emerging from seed. It does not control perennial sedge emerging from nutlets or perennial forms of kyllinga.

## Seeding, Overseeding, Re-Seeding, Sprigging and Sodding

#### SEEDING, RE-SEEDING, AND OVERSEEDING

Timing of seeding, re-seeding, overseeding, sprigging, and sodding turf relative to an application of INDAZIFLAM 74SC needs to be tracked carefully. INDAZIFLAM 74SC can inhibit root development, as well as the emergence of seed. Roots of newly emerged seedlings may be damaged and establishment of sod may be affected if INDAZIFLAM 74 SC is applied to turf that is not well established.

## Application of INDAZIFLAM 74SC prior to overseeding bermudagrass with perennial ryegrass or reseeding into warm season turf

INDAZIFLAM 74SC may be used to control weeds in bermudagrass prior to overseeding with a cool season grass or re-seeding seeded cultivars of bermudagrass, provided that the interval between application and seeding is appropriate (See INTERVAL BETWEEN APPLICATION OF INDAZIFLAM 74SC AND SEEDING OR OVERSEEDING table below). Overseeding and re-seeding intervals are affected by the rate of INDAZIFLAM 74SC applied, rainfall, and soil texture in a given year. Applications made sooner than the suggested intervals may decrease the establishment of the new seedlings and reduce turf coverage.

| TERVAL BETWEEN APPLICATION OF INDAZIFLAM 74SC AND SEEDING OR OVERSEEDING |                              |  |
|--------------------------------------------------------------------------|------------------------------|--|
| N .                                                                      |                              |  |
| RATE OF INDAZIFLAM 74SC (FL OZ/A)                                        | MINIMUM OVERSEEDING INTERVAL |  |
| 4.5-6                                                                    | 10 months                    |  |
| 6-10                                                                     | · 12 months                  |  |

#### WARM SEASON GRASSES ESTABLISHED WITH SPRIGS

INDAZIFLAM 74SC may be applied to sprigs of warm season grasses. The sprigs need to be well rooted prior to application. Apply the herbicide no sooner than 16 months after sprigging to allow for good stand establishment. Prior to application, check rooting to make sure new roots are developing. If roots are not growing, delay application of INDAZIFLAM 74SC.

#### APPLICATIONS ON SOD FARMS

INDAZIFLAM 74SC may be applied to turf on Bermudagrass, zoysiagrass, and bahiagrass sod farms. During new sod establishment, INDAZIFLAM 74SC may be applied when coverage from ribbons is 80% or greater.

Do not apply INDAZIFLAM 74SC to centipedegrass, seashore paspalum, or St. Augustinegrass sod.

INDAZIFLAM 74SC may be applied to sod up to 4 months prior to harvest.

#### SODDING WARM SEASON GRASSES

Delay sodding into bare ground or turf treated with INDAZIFLAM 74SC until 6 months after application. Sodding before 6 months may inhibit stand establishment and reduce turf quality. For maximum establishment of sod, follow the directions for use of activated charcoal above.

Sod needs to be actively growing/established at least 3 months prior to an application of INDAZIFLAM 74SC. Prior to application, check the turfgrass sod to make sure new roots are developing. If roots are not growing, delay application of INDAZIFLAM 74 SC.

## ORNAMENTALS, CHRISTMAS TREES, AND CONIFER PLANTATIONS

INDAZIFLAM 74SC may be applied for pre-emergent weed control in landscape ornamentals, hedgerows, production ornamentals in outdoor nurseries, shadehouses, hoophouses, Christmas trees, and conifer plantations. Apply INDAZIFLAM 74SC as a directed spray, prior to weed seed germination to the soil surface around dormant or actively growing ornamentals as listed in the table below. Apply INDAZIFLAM 74SC to established ornamentals. If the grower is uncertain about ornamental establishment after transplanting, wait 2 months before applying INDAZIFLAM 74SC.

## USE RESTRICTIONS FOR INDAZIFLAM 74SC ON LANDSCAPE AND PRODUCTION ORNAMENTALS, CHRISTMAS TREES, AND CONIFERS

- Do not exceed the maximum single application rates specified under each Ornamental use.
- Do not exceed a total of 18.5 fl oz of INDAZIFLAM 74SC per acre in a 12 month period.
- Do not allow spray to contact foliage. INDAZIFLAM 74SC may cause localized injury to the foliage, especially young leaf tissue. If the spray should contact the foliage, remove affected foliage or wash off immediately.
- Do not use INDAZIFLAM 74SC around bedding plants (annuals and herbaceous plants not specified, or not listed as tolerant
  on this label) or in areas where bedding plants may be planted or seeded for a minimum of one year after application of
  INDAZIFLAM 74SC to a landscape bed.
- Do not use INDAZIFLAM 74SC around bearing fruit and nut trees.
- Do not use INDAZIFLAM 74SC around non- bearing fruit trees unless they are at least 1 year old (citrus), 5 years old (grape vines) and 3 years old (all others). Non-bearing trees are defined as trees that will not bear fruit until at least 1 year after treatment.
- Do not use INDAZIFLAM 74SC within the dripline of bearing fruit and nut trees.
- Do not mix INDAZIFLAM 74SC into the soil. Cultivating or disturbing the soil surface after application may reduce weed control
  activity.
- Avoid applying INDAZIFLAM 74SC to heavily mulched landscape beds, as reduced weed control may occur. For best results remove existing mulch and replace mulch after an application of INDAZIFLAM 74SC.
- If transplanting mature plants listed as tolerant on this label into soil treated with INDAZIFLAM 74SC within the preceding 12 months? discard existing soil from the planting hole and add new soil around roots to minimize effects on plant establishment.
- Do not use INDAZIFLAM 74SC on ornamentals being grown in a greenhouse.
- Do not use INDAZIFLAM 74SC on nursery seedbeds, rooted cuttings or young plants in liners.
- Do not apply INDAZIFLAM 74SC to ornamentals growing in containers except pot-in-pot ornamentals.
- Do not apply INDAZIFLAM 74SC to ornamental bulbs in production fields.
- Do not apply INDAZIFLAM 74SC to ornamental bulbs in landscapes, commercial fields, or residential sites after they have emerged.
- Do not apply INDAZIFLAM 74SC to herbaceous perennials (e.g. hosta) after they have emerged.
- Do not apply INDAZIFLAM 74SC over-the-top of ornamentals.
- Do not apply INDAZIFLAM 74SC to budded grafts or graft unions as this could cause plant injury or death.
- Do not apply INDAZIFLAM 74SC by air.

#### USE OF INDAZIFLAM 74SC ON ORNAMENTALS IN COARSE AND SANDY SOILS

Soil conditions can affect the tolerance of ornamentals to INDAZIFLAM 74SC. Excessively coarse or sandy soils may allow for downward movement of INDAZIFLAM 74SC into the root zone and cause significant root damage and phytotoxicity. Coarse soils, for example, may include significant quantities of sand, gravel, decomposed granite, and ground cinders. Prior to application of INDAZIFLAM 74SC on these soils, confirm soil texture with a soil test. Ornamentals grown in soil exceeding 80% sand or 20% gravel may be at risk. If INDAZIFLAM 74SC is to be applied in these soils, evaluate tolerance of a few plants of each ornamental in INDAZIFLAM 74SC treated soil for 2-3 months prior to a large scale application.

#### SYMPTOMS OF INDAZIFLAM 74SC INJURY ON ORNAMENTALS

INDAZIFLAM 74SC may injure sensitive ornamentals by damaging roots or leaves. Plant foliage damaged by root absorption will appear stunted, deformed, and may not recover. If INDAZIFLAM 74SC is allowed to contact leaves, leaf symptoms including leaf spot, leaf discoloration, and leaf curl may appear. Symptoms appear within several days after application. Leaves formed after appearance of symptoms may recover.

Users must assess the severity of any symptoms on cultivars not listed on this label, before proceeding with large-scale applications of INDAZIFLAM 74SC. The user assumes all responsibility for damage on cultivars not listed on this label.

#### LANDSCAPE ORNAMENTAL USES

INDAZIFLAM 74SC may be used in residential, commercial, as well as federal, state and local plantings of ornamentals and hedgerows for pre-emergent weed control. INDAZIFLAM 74SC should be applied as a directed spray only to established (rooted) plants and not to newly rooted cuttings or seedlings. To avoid root damage, apply INDAZIFLAM 74SC around transplants when the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Make applications prior to mulching for best

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weed control. If INDAZIFLAM 74SC should contact foliage, wash off immediately to avoid damage. Herbaceous annuals and perennials are sensitive to INDAZIFLAM 74SC. Applications of INDAZIFLAM 74SC should only be made to ornamentals listed on this label.

**AMOUNT TO USE:** Apply INDAZIFLAM 74SC as a broadcast, directed spray at 6-12 fl oz/acre around ornamentals. When applying INDAZIFLAM 74SC with a backpack sprayer, follow all above restrictions.

To activate INDAZIFLAM 74SC for maximum herbicidal benefit, irrigate the area treated with INDAZIFLAM 74SC to move the herbicide into the soil within several days after application. With dry soil, use a minimum of 0.25 inches of irrigation water, and with soil at or greater than field capacity, the amount of irrigation water should be reduced. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

A subsequent application of INDAZIFLAM 74SC can be made within 90 days after the initial application to extend weed control provided that the maximum allowed rate does not exceed 18.5 fl oz per acre in a 12 month period.

#### COMBINATIONS OF INDAZIFLAM 74SC WITH NON-SELECTIVE HERBICIDES AROUND ORNAMENTALS

Remove existing weed growth before application of INDAZIFLAM 74SC or use a post-emergence herbicide labeled for control. INDAZIFLAM 74SC may be used in combination with a non-selective herbicide such as FINALE. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

When tank-mixing with other products, it is the responsibility of the end-user/applicator to ensure that the tank-mix partner is registered in the state where the application is being made.

#### PRODUCTION ORNAMENTAL USES

INDAZIFLAM 74SC provides up to 8 months of weed control with a single application. The exact length of control depends on many environmental factors as well as the weeds to be controlled and the weed pressure. Apply INDAZIFLAM 74SC as a directed spray to the soil surface only to established (rooted) plants in the soil or in pots and not to newly rooted cuttings/or seedling beds in production nurseries. Do not apply INDAZIFLAM 74SC to newly rooted cuttings/or seedling beds. To avoid root damage, apply INDAZIFLAM 74SC around transplants when the plant is well established and the soil has firmly settled around the root area. Irrigation or rainfall will help to settle the soil and seal surface cracks. Apply INDAZIFLAM 74SC around dormant plants. If applied after dormancy, care should be taken not to contact expanding buds or new leaves. Applications of INDAZIFLAM 74SC should only be made to ornamentals listed on this label. INDAZIFLAM 74SC should be applied to soil free of weeds, debris, and soil clods for optimum efficacy. Herbicidal efficacy may be reduced if soil is disturbed after application.

Application of INDAZIFLAM 74SC to deciduous foliage or green bark may result in unacceptable injury. Apply INDAZIFLAM 74SC to established ornamentals. If the grower is uncertain about ornamental establishment after transplanting, wait 2 months before applying INDAZIFLAM 74SC.

**AMOUNT TO USE:** Apply INDAZIFLAM 74SC as a broadcast, directed spray at 7.5-15.5 fl oz of INDAZIFLAM 74SC per acre (0.17 - 0.36 fl oz per 1,000 sq ft) around ornamentals in 20-100 gallons of water per acre (0.5-2.3 gallons of water per 1,000 sq ft). When applying INDAZIFLAM 74SC with a backpack sprayer, follow all above restrictions.

To activate INDAZIFLAM 74SC for maximum herbicidal benefit, irrigate the area treated with INDAZIFLAM 74SC to move the herbicide into the soil within 2 days after application. With dry soil, use a minimum of 0.125-0.25 inches of irrigation water. With soil at or greater than field capacity, reduce the amount of irrigation water. In either case, do not create conditions that cause visible run-off of irrigation water. Adequate rainfall following an application will negate the need for irrigation.

A subsequent application of INDAZIFLAM 74SC can be made within 90 days after the initial application provided that the maximum allowed rate does not exceed 18.5 fl oz per acre in a 12-month period.

#### COMBINATIONS OF INDAZIFLAM 74SC WITH NON SELECTIVE HERBICIDES AROUND ORNAMENTALS

Remove existing weed growth before application of INDAZIFLAM 74SC or use a post-emergence herbicide labeled for control. INDAZIFLAM 74SC may be used in combination with a non-selective herbicide such as FINALE. Avoid contact of spray containing a non-selective herbicide with foliage, stems, green bark, or bare roots of turfgrasses, trees, shrubs, or other desirable vegetation, since severe damage may result. If spraying areas adjacent to desirable plants with a non-selective herbicide, use a shield while spraying to help prevent spray from contacting foliage of desirable plants.

Do not apply INDAZIFLAM 74SC to plant types not listed as tolerant on this label. INDAZIFLAM 74SC may be applied to cultivars of listed tolerant plants that are not listed on this label. Prior to large-scale applications, treat a small number of such plants at the desired use rate. Treated plants should then be evaluated 1 to 2 months after application for possible injury and acceptable tolerance.

**IMPORTANT:** Direct application of INDAZIFLAM 74SC to the soil surface and away from plant foliage and bark. Avoid direct spray contact on plant surfaces, foliage, and green bark or injury may result. Application of INDAZIFLAM 74SC after bud swell may cause injury if herbicide contacts foliage. Avoid application under environmental conditions that favor drift to non-targeted areas. Deep cultivation reduces the effectiveness of INDAZIFLAM 74SC and should be avoided.

## ORNAMENTALS AND THEIR CULTIVARS TOLERANT TO INDAZIFLAM 74SC

Tolerant ornamentals and their cultivars are listed in the following table. Apply as a directed spray around tolerant ornamentals. If a cultivar to be treated is not listed on this label, treat several plants of the cultivar at the single maximum desired use rate and evaluate 1-2 months later for possible injury and acceptable tolerance. The user assumes responsibility for application on plants not listed in this table.

| Common Name                         | Scientific Name                | Cultivar                 |
|-------------------------------------|--------------------------------|--------------------------|
| Abelia                              | Abelia grandiflora             |                          |
| Apple                               | Malus sp.                      | (non-bearing)            |
| Apple                               | Malus domestica                | Haralred (non-bearing)   |
| Arborvitae                          | Thuja occidentalis             | Nigra                    |
| Arborvitae                          | Thuja occidentalis             | Techny                   |
| Arborvitae                          | Thuja occidentalis             | Green Giant              |
| Asparagus Fern                      | Asparagus plumosus             | Orech Glant              |
| Aspen, Quaking                      | Populus tremuloides            |                          |
| Aspen, Quaking                      | Rhododendron sp.               | Girard's Rose            |
| Azalea                              | Rhododendron sp.               | Fashion                  |
| Azalea                              | Rhododendron sp.               | VF 14                    |
| Azalea                              | Rhododendron sp.               | Golden Torch             |
| Azalea, Encore                      | Rhododendron sp.               | Autumn Debutante         |
| Bald Cypress                        | Taxodium distichum             | Additit Debutante        |
| Bamboo, Golden                      | Phyllostachys aurea            |                          |
| Barberry                            | Berberis sp.                   |                          |
| Birch                               | Betula populifolia             | Whitespire               |
| Birch, River                        | Betula nigra                   | Heritage                 |
| Birch, River                        | Betula nigra                   | Heritage                 |
| Black Tupelo                        | Nyssa sylvatica                | Wild Fire                |
| Bluebird                            | Caryopteris x clandonensis     | Dark Knight              |
| Boxwood                             | Buxus microphylla              | Green Beauty             |
| Boxwood                             | Buxus microphylla              | Chicagoland Green        |
| Boxwood                             | Buxus microphylla              | Baby Gem                 |
| Boxwood                             | Buxus microphylla              | Wintergreen              |
| Butterfly Bush                      | Buddleia Buddleia              | Nanho Blue               |
| Camellia                            | Camellia japonica              | Margaret Heathcliff Pink |
| Camellia                            | Camellia sasangua              | Cleopatra Pink           |
| Catalpa, Southern                   | Catalpa bignoniaceae           | Oleopatra i ilik         |
| Cedar, Atlantic white               | Chamaecyparis sp.              |                          |
| Cedar, Adamic Williams              | Juniperus virginiana           |                          |
| Cedar, Lasterri Neu Cedar, Japanese | Cryptomeria japonica           | Black Dragon             |
| Cedar, Japanese                     | Cryptomeria japonica           | Burkii                   |
| Cedar, Japanese                     | Cryptomeria japonica           | Yoshino                  |
| Cherry, American Plum               | Prunus americana               | 1 COTINIO                |
| Cherry, Okame                       | Prunus x incamp                |                          |
| Cherry,                             | Prunus serrulata               | Kwanzan                  |
| Cherry, Purple Leaf Sand            | Prunus cistena                 | IWanzan                  |
| Cherry, Sargent                     | Prunus sargentii               | Spring Wonder            |
| Cherry, Yoshino                     | Prunus x yedoensis             | Yoshino                  |
| Chokeberry                          | Aronia sp.                     | Tooline                  |
| Cotoneaster                         | Cotoneaster dammeri            | Coral Beauty             |
| Cottonwood                          | Populus deltoides              | Sioux                    |
| Crabapple                           | Malus x 'Harvest Gold'         | Oldax                    |
| Crabappie                           | Malus x 'Snowdrift'            |                          |
| Crabappie                           | Malus coronaria                |                          |
| Crape Myrtle                        | Lagerstroemia indica x fauriei | Muskogee                 |
|                                     | Lagerstroemia x 'Miami'        | Waskogee                 |
| Crape Myrtle                        |                                |                          |
| Crape Myrtle                        | Lagerstroemia indica x fauriei | Tuscarora                |
| Cotoneaster                         | Champagynaria an               | Coral Beauty             |
| Cypress, false                      | Chamaecyparis sp.              | Gold Mops                |
| Cypress, Mediterranean              | Cupressus sempervirens         |                          |
| Cypress, Leyland                    | Cupressus x leylandii          | Company                  |
| Daphne                              | Daphne caucasica               | Summer Ice               |
| Dawn Redwood,                       | Metasequoia glyptostroboides   | 0                        |
| Day-lily (before unfurling)         | Hemerocallis sp.               | Green Flutter            |
| Day-lily (before unfurling)         | Hemerocallis sp.               | Stella d'Oro             |
| Dogwood, Kousa                      | Cornus kousa                   | Kousa                    |

| Elm, American                                     | Ulmus americana                             |                               |
|---------------------------------------------------|---------------------------------------------|-------------------------------|
| Elm, Bosque                                       | Ulmus parvifolia                            |                               |
| Eucalyptus, Silver Dollar Gum                     | Eucalyptus polyanthemos                     |                               |
| Euonymus,                                         | Euonymus alatus                             | Compacta                      |
| ir,                                               | Abies fraseri                               |                               |
| Florida Pipestem                                  | Leucothoe populifolia                       |                               |
| orsythia                                          | Forsythia                                   | Lynwood                       |
| Forsythia                                         | Forsythia sp.                               | Golden Bells                  |
| Fragrant tea olive                                | Osmanthus fragrans Gardenia radicans        | Radicans                      |
| Gardenia<br>Gardenia                              | Gardenia jasminoides                        | Mystery                       |
| Gardenia                                          | Gardenia jasminoides                        | Frostproof                    |
| Gaura                                             | Gaura lindheimeri                           | Pink Fountain                 |
| Gold-Dust Plant                                   | Aucuba japonica                             | Gold Dust                     |
| Green Ash                                         | Fraxinus pennsylvanica                      |                               |
| Green Ash                                         | Fraxinus pennsylvanica                      | Georgia Gem                   |
| Hardy Kiwi                                        | Actinidia arguta                            | Anna                          |
| Hawthorn, Thornless Hibiscus, Chinese             | Crataegus crus-galli Hibiscus rosa-sinensis | Inermis San Diego Red         |
| Holly,                                            | llex x aquip                                | Jan Diego Neu                 |
| Holly,                                            | Ilex x attenuata                            | East Palatka                  |
| Holly, Chinese                                    | llex cornuta                                | Needlepoint                   |
| Holly, Foster                                     | llex x attenuata                            | Fosteri                       |
| Holly, Gallberry                                  | llex glabra                                 | Densa                         |
| Holly, Meservae                                   | llex meservae                               | Blue Princess                 |
| Holly, Nellie R. Stevens<br>Holly, American       | llex llex opaca                             | Nellie R. Stevens             |
| Holly,                                            | llex verticillata                           | Jim Dandy                     |
| Holly,                                            | Ilex verticillata                           | Red Sprite                    |
| Holly, Japanese                                   | llex crenata                                | Sky Pencil                    |
| Honeylocust,                                      | Gleditsia tricanthos                        | Sunburst                      |
| Honeylocust,                                      | Gleditsia tricanthos                        | Skyline                       |
| Indian Hawthorn                                   | Raphiolepsis indica                         | Pink Lady                     |
| Japanese Cleyera<br>Japanese Mock-orange          | Ternstromia gymnanthera Pittosporum tobira  | Variegata                     |
| Japanese Mock-orange Jasmine, Asiatic/Yellow Star | Trachelospermum asiaticum                   | vanegata                      |
| Jasmine, winter                                   | Jasminum nudiflorum                         |                               |
| Juniper, Bar Harbour                              | Juniperus horizontalis                      | Bar Harbour                   |
| Juniper, Blue Pacific                             | Juniperus conferta                          | Blue Pacific                  |
| Juniper, Blue Rug                                 | Juniperus horizontalis                      | Blue Rug                      |
| Juniper, Brodie                                   | Juniperus virginiana                        | Sporton                       |
| Juniper, Spartan<br>Lantana                       | Juniperus chinensis<br>Lantana camara       | Spartan Landmark Sunrise Rose |
| Lantana<br>Lilac                                  | Syringa x 'Penda'                           | Bloomerang                    |
| London Plane Tree,                                | Plantanus acerifolia                        |                               |
| Loropetalum                                       | Loropetalum chinensis                       | Burgundy                      |
| Loropetalum                                       | Loropetalum chinensis                       | Ruby                          |
| Magnolia,                                         | Magnolia grandiflora                        | Bracken Brown Beauty'         |
| Magnolia,                                         | Magnolia grandiflora                        | Little Gem                    |
| Magnolia, Jane                                    | Magnolia liliflora 'Nigra' x M. stellata    | Rosea                         |
| Maple, Autumn Blaze                               | Acer freemanii Acer rubrum                  | Jeffersred                    |
| Maple, red<br>Maple, Red                          | Acer rubrum Acer rubrum                     | Red Sunset                    |
| Maple, Red<br>Maple, Red                          | Acer rubrum Acer rubrum                     | October Glory                 |
| Maple, Neu Maple, Silver                          | Acer saccharinum                            |                               |
| Maple, Sugar                                      | Acer saccharum                              |                               |
| Maple, Sugar                                      | Acer saccharum                              | Commemoration                 |
| Nandina                                           | Nandina domestica.                          | Firepower                     |
| Ninebark,                                         | Physocarpus opulifolius                     | Summer Wine                   |
| Oak, Southern Live                                | Quercus virginiana                          | CDIN                          |
| Oak, Cathedral Live                               | Quercus virginiana                          | SDLN                          |
| Oak, Northern Red Oak, Nuttal                     | Quercus rubra Quercus nuttallii             |                               |
| Oak, Nuttai<br>Oak, Shumard                       | Quercus nuttaiiii Quercus shumardii         |                               |
| Oak, Shamara Ohio Buckeye,                        | Aesculus glabra                             |                               |
|                                                   | Transfer States                             |                               |

| •                    |                           |                 |
|----------------------|---------------------------|-----------------|
| Palm, Areca          | Dypsis lutescens          |                 |
| Palm, Manila         | Adonidia merrillii        |                 |
| Palm, Alexander      | Archontophoenix alexandre |                 |
| Palm, Florida Thatch | Thrinax radiate           | <u>'</u>        |
| Palm, Spindle        | Hyophorbe verschaffeltii  |                 |
| Pear, Callery        | Pyrus calleryana          | Chanticleer     |
| Pear, Callery        | Pyrus calleryana          | Bradford        |
| Pieris,              | Pieris japonica           | Shojo           |
| Pine, Canary Island  | Pinus canariensis         |                 |
| Pine, Eastern White  | Pinus strobus             |                 |
| Pine, Scotch         | Pinus sylvestrus          |                 |
| Pistache, Texas      | Pistacia texana           |                 |
| Plum, Crimson Pointe | Prunus x cerasifera       | Cipriozam       |
| Podocarpus           | Podocarpus macrophyllus   |                 |
| Privet,              | Ligustrum sp.             |                 |
| Redbud, Eastern      | Cercis canadensis         | MN Strain       |
| Redbud,              | Cercis reniformis         | Oklahoma        |
| Rhododendron,        | Rhododendron x crete      |                 |
| Rose,                | Rosa wichurana            | Dr. Huey        |
| Rose                 | Rosa sp.                  | Pink Knock Out® |
| Rose                 | Rosa sp.                  | Knock Out®      |
| Rose, Virginia       | Rosa virginiana           |                 |
| Rose Mallow          | Hibiscus moscheutos       |                 |
| Rose of Sharon       | Hibiscus syriacus         | Pink Heart      |
| Rose of Sharon       | Hibiscus syriacus         | Boule de Feu    |
| Russian Sage         | Perovskia atriplicifolia  |                 |
| Skip Laurel,         | Prunus laurocerasis       |                 |
| Snowberry, common    | Smyphoricarpos albus      |                 |
| Spicebush,           | Lindera benzoin           |                 |
| Spruce, Blackhills   | Picea glauca              |                 |
| Spruce, Norway       | Picea abies               |                 |
| Tamarisk,            | Tamarix ramosissima       | Pink Cascade    |
| Taxus (Yew)          | Taxus cuspidata           | Capitada        |
| Thin-fruit Sedge     | Carex flaccosperma        |                 |
| Viburnum, Burkwood   | Viburnum x burkwoodii     | ,               |
| Virbunum             | Virbunum lantana          | Mohican         |
| Viburnum, popcorn    | Viburnum plicatum         | Popcorn         |
| Wax myrtle, southern | Myrica cerifera           |                 |
| Weigelia, variegated | Weigelia variegate        |                 |

Do not use INDAZIFLAM 74SC on any of these plants, as injury will occur.

| Common Name            | Scientific Name          |
|------------------------|--------------------------|
| Blue Fescue Grass      | Festuca glauca           |
| Columbine              | Aquilegia canadensis     |
| Coneflower             | Echinacea purpurea       |
| Croton                 | Codiaeum variegatum      |
| Dianthus               | Dianthus sp.             |
| Euonymus, Japanese     | Euonymus japonicus       |
| Fountain Grass         | Pennisetum alopecuroides |
| Fountain Grass, purple | Pennisetum setaceum      |
| Golden Dewdrops        | Duranta erecta           |
| Hydrangea              | Hydrangea macrophylla    |
| lxora                  | Ixora coccinea           |
| Lavender, Munstead     | Lavandula angustifolia   |
| Lilyturf               | Linope sp.               |
| Mint                   | Mentha sp.               |
| Mondo Grass            | Ophiopogon japonicus     |
| Muhlygrass             | Muhlenbergia capillaries |

| Plumbago                  | Plumbago spp.          |
|---------------------------|------------------------|
| Sage                      | Salvia spp             |
| Sweet Viburnum            | Viburnum odoratissimum |
| Tickseed, Dwarf mouse-ear | Coreopsis auriculata   |
| Weigela                   | Weigela spp.           |

## **CONIFERS AND CHRISTMAS TREES**

INDAZIFLAM 74SC may be used for pre-emergence weed control in conifer nurseries and Christmas tree farms. INDAZIFLAM 74SC may be applied as a directed spray to soil surrounding established plants. Avoid contacting plant stems and leaves with the directed spray solution as injury may occur. Established plants are transplants that are actively growing and where the soil has settled. Do not apply to seedlings or seedling beds. Apply 7.5-15.5 fl oz of INDAZIFLAM 74SC per acre for these uses. Do not exceed 18.5 fl oz of INDAZIFLAM 74SC per acre in a growing season.

INDAZIFLAM 74SC may be tank-mixed with products containing the following active ingredients labeled for use in conifers: glyphosate or glufosinate (FINALE). Do not apply tank-mixes of INDAZIFLAM 74SC with these active ingredients to conifer and Christmas tree foliage. Follow use restrictions on all labels.

# NON-SELECTIVE USES HARDSCAPES

INDAZIFLAM 74SC may be used to maintain bare ground in non-crop areas. These include but are not limited to gravel rocky or sandy areas in desert climates, and cart paths adjacent to golf courses and residential areas. All weeds and debris should be removed from these areas to be treated for optimum control. Observe all restrictions and tolerances for applications of INDAZIFLAM 74SC around ornamentals listed on this label.

Apply 9 - 18.5 fl oz of INDAZIFLAM 74SC per acre with uniform coverage to target area. Use a minimum spray volume of 10-20 gallons per acre.

If weeds are present at the time of application, tank-mix a post-emergent herbicide such as glyphosate or Finale with INDAZIFLAM 74SC. Observe all use restrictions on this label and on the label of the tank-mix partner. Adequate irrigation or rainfall after application of INDAZIFLAM 74SC will provide maximum weed control.

#### ORNAMENTAL PRODUCTION FACILITIES

INDAZIFLAM 74SC may be used in non-enclosed ornamental production facilities such as greenhouses (floors only), areas covered by landscape fabric, hoophouses, lathhouses and shadehouses to provide bare ground and general weed control beneath benches and potted plants. INDAZIFLAM 74SC may injure the foliage of ornamentals; prevent spray from contacting foliage. Make applications to these sites during clean up, sanitation and preparation prior to plant production. Apply 9 - 18.5 fl oz product per acre with uniform coverage to target area. Use a minimum spray volume of 20 gallons per acre.

If weeds are present at the time of application, tank-mix a post-emergent herbicide such as Finale with INDAZIFLAM 74SC. Observe all use restrictions on this label and on the label of the tank-mix partner. Water in INDAZIFLAM 74SC after application and allow applied surface to dry prior to introducing plants. For outdoor applications, containers can be moved onto the treated ground bed areas after irrigation or rainfall and once the treated surface has dried.

Do not mix with products containing chlorine bleach products. When tank mixing with other products, it is the responsibility of the end-user/applicator to ensure that the tank-mix partner is registered in the state for the application being made.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

#### **PESTICIDE STORAGE**

Store in original container only. Store in a manner to prevent cross-contamination of other pesticides, fertilizer, food, and feed. Do not store in or around the home. Store in a dry, locked storage area.

#### PESTICIDE DISPOSAL

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

#### **CONTAINER HANDLING**

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then puncture and dispose of in a sanitary landfill or by other procedures approved by State and local authorities.

## IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

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## ACCEPTED

DEC 12 2012

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under 432-1518

#### PRODUCED FOR



A Division of Bayer CropScience, LP PO Box 12014 2 T.W. Alexander Drive Research Triangle Park, NC 27709

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