

432-1517

8/28/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Richard M. Gorrell
Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

AUG 28 2014

Subject: Notification; Per PR-Notices 98-10 & 2007-4
Esplanade F Herbicide
EPA Reg. No. 432-1517
Date Submitted: August 20, 2014

Dear Mr. Gorrell:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notices (PRN) 98-10 and 2007-4 dated August 20, 2014 for the product referenced above. The Registration Division (RD) has conducted a review of these requests for applicability under PRN 98-10 and 2007-4 and finds that the actions requested fall within the scope of both notices. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions regarding this letter, please contact me at (703) 306-0415 or davis.kable@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis", enclosed within a large, loopy oval shape.

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



United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 432-1517	2. EPA Product Manager Kable Bo Davis	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Esplanade F Herbicide	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) Bayer Environmental Science 2 T.W. Alexander Drive RTP, NC 27709 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input checked="" type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

See attached document for full explanation

*- certification statements on next page***Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____	
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Richard M. Gorrell		Title Manager, Registrations		Telephone No. (Include Area Code) 919-549-2423	
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature <i>Richard M. Gorrell</i>		3. Title Manager, Registrations			
4. Typed Name Richard M. Gorrell		5. Date August 20, 2014			

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

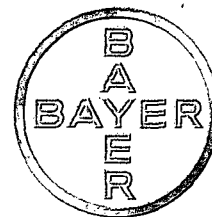
Notification of label change per PR Notice 2007-4. This notification is consistent with the guidance of PR Notice 2007-4 and the requirements of EPA's regulations at 40 CFR 156.10, 156.140, 156.144, 156.146, and 156.156. No other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if the amended label is not consistent with the requirements of 40 CFR 156.10, 156.140, 156.144, 156.146, and 156.156, this product may be in violation of FIFRA and it may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

-Minor changes to the label as highlighted (word replacement, added tree species, and corrected Storage and Disposal wording)

NOTIFICATION

AUG 28 2014

Bayer CropScience



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August 20, 2014

EPA14RMG0820EsplanadeFNotifConifHardw.
FedEx

Mr. Kable Davis (PM 25)
U.S. Environmental Protection Agency
Office of Pesticide Programs (7504P)
Document Processing Desk (REGFEE)
Room S-4900, One Potomac Yard
2777 South Crystal Drive
Arlington, VA 22202-4501

Bayer CropScience
2 T.W. Alexander Drive
RTP, NC 27709
Phone : 919.549.2000

RE: Esplanade F Herbicide (432-1517): Notification to Change the Wording "Forested Areas"
to "Conifer and Hardwood Areas"

Dear Mr. Davis:

Bayer Environmental Science (BES) is notifying the Agency of a change to the Esplanade F Herbicide label. BES is changing the word "Forested" and replacing it with "Conifer and Hardwood". The word "forested" appears in three places in the label text. The replacement wording "conifer and hardwood" is highlighted in yellow for your convenience.

A second change which is also minor is the addition of the conifer species "ponderosa pine." In the Storage and Disposal section the word "Disposal" was replaced with the word "Handling" as directed by the EPA.

This letter contains the following information:

- 8570-1 Application Form
- 5 copies of the revised label (one shaded copy)

If you have any questions, contact me at (919) 549-2423 or email me at mike.gorrell@bayercropscience.com.

Sincerely,

Richard M. Gorrell
Manager, Registrations

Incl.

Cc Karen Shearer (Bayer)

NOTIFICATION

AUG 28 2014

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GROUP 29 HERBICIDE

Esplanade F Herbicide

For Preemergent Weed Control in Forested Conifer and Hardwood Areas

ACTIVE INGREDIENT:

Indaziflam (CAS No: 730979-19-8).....19.05%

OTHER INGREDIENTS:.....80.95%

Total.....100.00%

EPA Reg. No. 432-1517

EPA Est.

Contains 1.67 pounds of indaziflam per gallon

KEEP OUT OF REACH OF CHILDREN

CAUTION

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-800-334-9745

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.
- 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, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

If on skin

- 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, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

Note to physician: No specific antidote is available. Treat symptomatically.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through the skin or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

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All mixers, loaders, applicators and other handlers must wear:

- long-sleeved shirt and long pants,
- shoes plus socks.
- chemical resistant gloves made of any waterproof material such as natural rubber \geq 14 mils.

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.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change 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 water mark. Do not contaminate water when disposing of rinseate or washwater. This product may impact 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 of this product entering water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

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

Surface Water Advisory: This pesticide may impact water quality due to runoff of rainwater. 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.

DIRECTIONS FOR USE

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

SHAKE CONTAINER WELL BEFORE USING.

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

Shoes plus socks

Chemical resistant gloves made of any waterproof material

PRODUCT INFORMATION

Esplanade F Herbicide is a selective, preemergent, alkylazine herbicide for control of grasses and broadleaf weeds in conifer and hardwood forested areas.

Esplanade F Herbicide controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB Inhibitor). Necrosis or yellowing may also be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems of susceptible plants. The herbicide needs to be activated prior to weed germination for most effective control. For maximum activity against germinating weeds, Esplanade F Herbicide requires rainfall (minimum 0.25 inches) within several weeks after application to activate the herbicide.

Esplanade F Herbicide has minimal post-emergent activity and generally does not control weeds that have emerged. A post-emergent herbicide may be mixed with Esplanade F Herbicide to control existing weeds. Esplanade F Herbicide does not control tubers, rhizomes, and woody vegetation.

Esplanade F Herbicide can be applied to terrestrial non-crop sites and unimproved sites that contain areas of casual water of a temporary nature as a result of surface water collecting in equipment wheel ruts or in other depressions created by management activities.

Esplanade F Herbicide may be applied by ground or aerial equipment.

USE RESTRICTIONS

- Do not apply Esplanade F Herbicide to soil where standing water is present except as specified on this label.
- Do not contaminate water intended for irrigation and domestic use.
- Do not exceed 10 fl oz/A of Esplanade F Herbicide in a single application for forestry uses.
- Do not exceed 10 fl oz/A for all forestry applications of Esplanade F Herbicide within a calendar year or in a 12-month period from the previous application.
- Do not apply Esplanade F Herbicide through an irrigation or chemigation system.
- Do not apply Esplanade F Herbicide within 50 feet of ponds, lakes, rivers, streams, ditches, wetlands, and habitat containing aquatic and semi-aquatic plants. Refer to the Spray Drift Management section of this label for more information.

APPLICATION INFORMATION

Apply Esplanade F Herbicide 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 overlap. Shut off spray booms while starting, turning, slowing or stopping to avoid off-target application.

For ground application, use 10-100 gallons of spray volume per acre to ensure adequate coverage. For aerial application, use 5-30 gallons of spray volume per acre. Use a sufficient volume of water and an effective delivery system to ensure thorough coverage of the soil. The use of a hand-held or backpack sprayer is allowed, especially when treating smaller areas. The water volume and use rates are the same on a given area as if treating with a much larger boom sprayer. When using a hand-held or backpack sprayer, do not exceed the use rate restrictions stated on this label.

Esplanade F Herbicide may be used for preemergent residual control of certain weeds in establishment of conifer and hardwood forests. Make a broadcast application of 3.5-10 fl oz /A of Esplanade F Herbicide after transplanting when the soil has settled. Applications made to trees under stress may injure these trees. Use 7.0-10 fl oz for longer residual control. The total of Esplanade F Herbicide applied in a 12 month period, however, must not exceed 10 fl oz/A. Esplanade F Herbicide may be tank-mixed with other pre and post emergent herbicides for broader spectrum of control and for control of existing weeds provided that all restrictions for both products are observed.

Conifers that can be treated with Esplanade F Herbicide include loblolly, longleaf, ponderosa, shortleaf, slash, and Virginia pine as well as redwood, Douglas fir, western larch, and western white pine.

For hardwood, apply before tree seedlings break dormancy. Applications made over-the-top may injure trees at bud swell stage or beyond. Trees that can be treated include ash, chestnut, cottonwood, eucalyptus, maple, hybrid poplar and yellow poplar, sweetgum, sycamore, and oaks.

MIXING INSTRUCTIONS

Ensure that the application equipment has been thoroughly cleaned from previous use before using to apply Esplanade F Herbicide. Fill the spray tank with 1/2 of the required volume of water prior to the addition of Esplanade F Herbicide. Add the proper amount of Esplanade F Herbicide, and then add the rest of the water. Maintain sufficient agitation to ensure an adequate spray mixture during application. If Esplanade F Herbicide is to be applied in a tank mixture with other pesticides, add the appropriate amounts of the tank mix partners in the following order: (a) products in water-soluble packaging (WSP's), (b) WP's, (c) WG's or other dry flowables, (d) fertilizers, (e) Esplanade F Herbicide, (f) other aqueous suspension products (SC's), (g) liquid flowables, (h) emulsifiable concentrates and other organic-solvent based formulations. Continue to fill the tank with water to the desired volume while agitating. **Maintain sufficient agitation during application to ensure a uniform spray mixture.**

Re-suspending Esplanade F Herbicide in Spray Solution: Like other suspension concentrates (SC's), this product will settle if left standing without agitation. Reagitate the spray solution for a minimum of 10 minutes before application.

TIMINGS, USE RATES, AND MAXIMUM SEASONAL RATE FOR ESPLANADE F HERBICIDE

Apply Esplanade F Herbicide prior to germination of targeted weeds. Esplanade F Herbicide does not generally control weeds that have emerged. Esplanade F Herbicide needs to reach the soil surface for best efficacy. Removing debris prior to application will facilitate contact with soil. The desired rate of this product depends on the residual weed activity required and restrictions on the maximum amount of Esplanade F Herbicide per season. Esplanade F Herbicide may be applied at 3.5-10 fl oz/A either as a broadcast treatment during site preparation or to established stands, or as a banded spray to the rows of trees, prior to or after planting.

Do not exceed 10 fl oz of this product for a single application. Applications of Esplanade F Herbicide must not exceed 10 fl oz/A within the yearly calendar year, or in a 12-month period from the time of the first application. As such, full dosages may be applied to all soil types and in all regions where trees are grown. When tank mixing Esplanade F Herbicide with other products, follow the regionally-specific, crop-tree-specific, and soil-specific guidelines found on other product labels.

For late fall applications, apply Esplanade F Herbicide prior to when the ground freezes. Length of control may vary outside of the stated limits. Factors including soil type, rainfall, and the amount of vegetation at the time of treatment may affect weed control. Lower rates of Esplanade F Herbicide may be effective for sandy soils, whereas fine textured soils may require higher rates. If the herbicide is not activated by rainfall, control may not be satisfactory.

Site Preparation – Apply this product after plowing, bedding, burning or any other mechanical or cultural site-preparation practice. Excessive soil disturbance (i.e., cultivation) after application will substantially reduce the preemergent activity of the product.

Application during site preparation may be made by ground or air (e.g., helicopter or fixed-wing aircraft). Accurate calibration of equipment is necessary to achieve uniform droplet distribution and coverage on the soil surface. If excessive vegetation is present, insufficient amounts of Esplanade F Herbicide will reach the soil surface to ensure uniform preemergent weed control. Apply a minimum of 5 gal/A of spray volume.

Herbaceous Weed Control/Hardwood and Conifer Release – Apply this product before or after transplanting as a broadcast spray, or by a banded application to beds or rows. Esplanade F Herbicide may be applied over-the-top of conifers. Applications may be done by air or ground equipment. Apply a minimum of 5 gal/A of spray volume to ensure adequate coverage of the soil surface.

Applications made to trees under stress may injure these trees. For hardwoods release, apply Esplanade F Herbicide before crop tree breaks dormancy. Applications made over-the-top may injure trees at bud swell stage or beyond.

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 ground and aerial application equipment must be set to apply medium to large 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.

Sensitive Areas

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

Only apply this product when the potential for drift to adjacent sensitive areas is minimal (e.g. when wind is blowing away from the sensitive areas). The applicator is responsible for considering all these factors when making decisions. Do not apply under circumstances where possible drift to unprotected persons, food, forage, or other plantings that might be damaged, as crops thereof may be rendered unfit for sale, use, or consumption.

Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Many factors influence spray drift potential including droplet size, equipment type and local terrain. Drift potential increases if wind is in excess of 10 mph, gusty, or below 2 mph (due to inversion potential). Always make applications when there is some air movement to determine the direction and distance of possible spray drift. The applicator should be familiar with local conditions and how it may influence spray drift.

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.

Controlling Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that still provide sufficient coverage and control. Uniform spray coverage is important to maximize weed control. Applying larger droplets will reduce drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions such as wind speed, temperature and humidity, and temperature inversion situations.

Spray volume, pressure, and nozzle selection are all important for reducing drift. Select a high flow rate nozzle to apply the highest practical spray volume. High flow rate nozzles produce larger droplets. Use lower spray pressures within the recommended range for the nozzle. If a higher flow rate is needed, increase the nozzle size instead of increasing pressure. Lower spray pressures produce larger droplets. Also, consider using low-drift nozzles.

Drift control additive may also be used with most spray equipment to reduce the potential for drift. When using a drift control additive, read and follow all directions on the additive label.

Shielding the boom or individual nozzles may also reduce the potential for drift. However, it is the responsibility of the applicator to verify that the shield does not interfere with uniform spray coverage.

When applying by air, orient nozzles so that the spray is applied backwards, parallel to the airstream. This practice will produce larger droplets than other nozzle orientations. With fixed-wing aircraft, the length of the boom should not exceed 3/4 the length of the wing. For helicopters, use a boom length and position that prevents the spray from entering the rotor vortices.

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. Avoid application if wind conditions are gusty. 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.

Tank Mix Combinations

Esplanade F Herbicide may be tank mixed with any herbicide product registered for use in forested conifer and hardwood areas. The list of herbicides that can be tank mixed with Esplanade F Herbicide includes but is not limited to: 2,4-D, aminopyralid, bromacil, dicamba, flumioxazin, fosamine, Finale®/Derringer™, glyphosate, hexazinone, imazapyr, metsulfuron, picloram, simazine, sulfometuron, and triclopyr.

Follow all use restrictions on this label and for all tank mix partners and use the most restrictive use pattern for the labels of all products in a tank mixture.

Apply mixtures so that the spray solution covers the soil surface in a uniform manner. If uniform coverage is not achieved, preemergent activity will be inconsistent.

COMPATIBILITY TESTING WITH OTHER PESTICIDES

A compatibility test must be conducted with any potential tank mix partner with Esplanade F Herbicide. Using a clear container, conduct the test as described below:

Fill the container three-quarters full with water.

1. Add the appropriate amounts of tank mix partners in the following order: (a) products in water-soluble packaging (WSP's), (b) WP's (c) WG's or other dry flowables, (d) fertilizers, (e) Esplanade F Herbicide (f) other aqueous suspension products (SC's), (g) liquid flowables, (h) emulsifiable concentrates and other organic-solvent based formulations. Shake or gently stir after each addition to mix thoroughly.
2. 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.
3. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with Esplanade F Herbicide.

Resistance Management Guidelines

Continual use of herbicides with a single mode of action encourages the development of resistant weeds. Esplanade F Herbicide is a Group 29 Herbicide that contains the active ingredient indaziflam. Esplanade F Herbicide may be used in programs with other preemergence herbicides with different modes of action. No known resistance to Esplanade F Herbicide exists, and there are no known instances of cross resistance between this product and other classes of herbicides, or modes of action. Performance of this product is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulant, or other herbicide modes of action. When resistance of a specific weed is confirmed, rotation of Esplanade F Herbicide in one season followed by a preemergent herbicide with another mode of action in the subsequent season, for example, will reduce existing populations and minimize further development of resistant weeds. Contact a Bayer Environmental Sciences representative for the latest information on resistance management guidelines for this product.

Weeds Controlled or Suppressed by Esplanade F Herbicide	
Broadleaf Weeds Controlled	
American black nightshade	<i>Solanum americanum</i>
Bittercress	<i>Cardamine sp.</i>
Buckweed, wild (seedlings only)	<i>Polygonum convolvulus</i>
California burclover	<i>Medicago polymorpha</i>
Canada thistle, common (seedlings)	<i>Cirsium arvense</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed, common	<i>Stellaria media</i>
Chickweed, Mouse-ear	<i>Cerastium vulgatum</i>
Clover, White	<i>Trifolium repens</i>
Corn speedwell	<i>Veronica arvensis</i>
Cudweed, Linear-leaf/purple	<i>Gnaphalium purpureum</i>
Curly dock (seedlings)	<i>Rumex crispus</i>
Cutleaf evening primrose	<i>Oenothera laciniata</i>
Dandelion, cat's ear	<i>Hypochoeris radicata</i>
Dandelion, common (seedlings)	<i>Taraxacum officinale</i>
Doveweed	<i>Murdannia nudiflora</i>
Eclipta	<i>Eclipta alba</i>
Evening primrose, common	<i>Oenothera biennis</i>
Evening primrose, cutleaf	<i>Oenothera laciniata</i>
Filaree, redstem	<i>Erodium cicutarium</i>
Fleabane, blackleaved	<i>Conza bonariensis</i>
Florida pusley	<i>Richardia scabra</i>
Gromwell, Yellow	<i>Amsinckia calycina</i>
Groundsel, common	<i>Senecio vulgaris</i>
Hairy fleabane	<i>Erigeron bonariensis</i>
Hairy nightshade	<i>Solanum sarrachoides</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed/Marestail	<i>Erigeron canadensis</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, common	<i>Chenopodium album</i>
Lawn burweed	<i>Soliva pterosperma</i>
Little mallow	<i>Malva parviflora</i>
Long-stalk phyllanthus	<i>Phyllanthus tenellus</i>
Panicle willowweed	<i>Epilobium paniculatum</i>
Plantain, Buckhorn	<i>Plantago lanceolata</i>
Plantain, Paleseed	<i>Plantago virginica</i>
Prostrate knotweed	<i>Polygonum aviculare</i>
Prostrate pigweed	<i>Amaranthus blitoides</i>
Prostrate spurge	<i>Euphorbia humifusa</i>
Purslane, common	<i>Portulaca oleracea</i>
Ragweed, common	<i>Ambrosia artimisiifolia</i>
Red tasselflower	<i>Emilia sonchifolia</i>
Redmaids	<i>Calandrinia caulescens</i>
Redroot pigweed	<i>Amaranthus retroflexus</i>
Redstem fleabane/Storksbill	<i>Erodium cicutarium</i>
Russian Thistle	<i>Salsola tragus</i>
Shepherd's-purse	<i>Capsella bursa-pastoris</i>
Sowthistle, Annual	<i>Sonchus olerachus</i>
Spotted catsear	<i>Hypochoeris radica</i>
Swinecress	<i>Coronopus didymus</i>

Tropic ageratum	<i>Ageratum conyzoides</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Wild buckwheat (seedlings)	<i>Polygonum convolvulus</i>
Wild mustard	<i>Sinapis arvensis</i>
Grasses and Sedges Controlled	
Annual bluegrass	<i>Poa annua</i>
Barnyardgrass, common	<i>Echinochloa crus-galli</i>
Crabgrass	<i>Digitaria species</i>
Crabgrass, Henry	<i>Digitaria adscendens</i>
Crabgrass, Large/Hairy	<i>Digitaria sanguinalis</i>
Crabgrass, Smooth	<i>Digitaria ischaemum</i>
Cheatgrass	<i>Bromus secalinus</i>
False chamomile	<i>Matricaria maritime</i>
Foxtail brome	<i>Bromus rubens</i>
Foxtail, Giant	<i>Setaria faberi</i>
Foxtail, Green	<i>Setaria viridis</i>
Foxtail, Yellow	<i>Pennisetum glaucum</i>
Goosegrass	<i>Eleusine indica</i>
Guineagrass	<i>Panicum maximum</i>
Mouse barley	<i>Hordeum murinum</i>
Sedge, annual	<i>Cyperus spp.</i>
Rice flatsedge	<i>Cyperus iria</i>
Ryegrass, Italian	<i>Lolium multiflorum</i>
Ryegrass, Perennial	<i>Lolium perenne</i>
Sprangletop	<i>Leptochloa spp.</i>
Tufted lovegrass	<i>Eragrostis pectinacea</i>
Weeds Suppressed	
Black medic	<i>Medicago lupulina</i>
Black mustard	<i>Brassica nigra</i>
False chamomile	<i>Matricaria maritime</i>
London rocket	<i>Sisymbrium irio</i>
Nutsedge, purple	<i>Cyperus rotunda</i>
Nutsedge, yellow	<i>Cyperus esculentus</i>
Prickly lettuce	<i>Lactuca serriola</i>
Sesbania, hemp	<i>Sesbania exaltata</i>
Sida, prickly/teaweed	<i>Sida spinosa</i>
Southern brassbuttons	<i>Cotula australis</i>
Sunflower, common	<i>Helianthus spp.</i>
Vetch, purple	<i>Vicia benghalensis</i>
Wild carrot	<i>Daucus carota</i>
Woodsorrell, yellow	<i>Oxalis stricta</i>
Woodsorrell/Oxalis	<i>Oxalis species</i>

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Protect this product from freezing temperatures.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous.

Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL HANDLING: Non-refillable container. Do not reuse or refill this container. 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 1/4 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. Offer for recycling, if available or reconditioning, if appropriate. Then puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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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. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

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Net Contents:

PRODUCED FOR



Bayer Environmental Science

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Esplanade F Herbicide (PENDING) 08/15/2014