

62719-547

07/20/2007

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

NOTIFICATION

JUL 20 2007

JUL 20 2007

Rafael Herrera
Regulatory Manager
Dow AgroSciences LLC
9330 Zionsville Road
Indianapolis, IN 46268

SUBJECT: Application for Pesticide Notification – Primary Brand Name Change and Minor Labeling Changes
Sapphire™
EPA Reg. No. 62719-547
Application Dated July 5, 2007

Dear Mr. Herrera:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records.

If you have any questions, please contact me directly at 703-305-6249 or Terri Stowe of my staff at 703-305-6117.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda Arrington".

Linda Arrington
Notifications & Minor Formulations Team Leader
Registration Division (7505P)
Office of Pesticide Programs



United States
Environmental Protection Agency
Washington, DC 20460

 Registration
 Amendment
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number Dow AgroSciences/62719-547	2. EPA Product Manager Joanne I. Miller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Dow AgroSciences/Sapphire	PM# 23	
5. Name and Address of Applicant (Include ZIP Code) Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268 <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 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.

NOTIFICATION
JUL 20 2007

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

Changes by notification: 1. Changed main brand name from GF-907 37.5 g/l SC to Sapphire; 2. Changed generic descriptor from herbicide to specialty herbicide; 3. Added instructions for Tip 'n Measure container to the base label; 4. General Use Precautions and Restrictions: Clarified use directions by adding the statement "Tank mix a quality nonionic surfactant with all applications of Sapphire."

Section - III

1. Material This Product Will Be Packaged In:

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	2. Type of Container <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
 Label Container

4. Size(s) Retail Container

5. Location of Label Directions

6. Manner in Which Label is Affixed to Product
 Lithograph
 Paper glued
 Stenciled Other _____

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name Rafael Herrera	Title Regulatory Manager	Telephone No. (Include Area Code) (317) 337-4672 (fax: 317-337-4649)
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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.

2. Signature 	3. Title Regulatory Manager	6. Date Application Received (Stamped)
4. Typed Name Rafael Herrera (rherrera@dow.com)	5. Date July 5, 2007	

308/2E
July 5, 2007



Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504P)
U. S. Environmental Protection Agency
One Potomac Yard
2777 S. Crystal Drive
Arlington, VA 22202

NOTIFICATION
JUL 20 2007

SAPPHIRE (A.I. PENOX SULAM)
EPA REGISTRATION NUMBER: 62719-547
NOTIFICATION OF MINOR LABEL CHANGE PER PR NOTICE 98-10

Enclosed please find labeling for the notification action of Sapphire™ specialty herbicide. The following changes have been made by notification:

1. Changed main brand name from GF-907 37.5 g/l SC to Sapphire.
2. Changed generic descriptor from herbicide to specialty herbicide.
3. Added instructions for Tip 'n Measure container to the base label.
4. General Use Precautions and Restrictions: Clarified use directions by adding the statement "Tank mix a quality nonionic surfactant with all applications of Sapphire."

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.

Contents of Submission

- Transmittal document (this letter)
- Application for Pesticide, EPA Form 8570-1 with attached Registration Notes
- Label entitled Sapphire (E9A/Sapphire/MSTR Notif/07-05-07) (10 Pages plus Registration Notes) (5 Copies)

If you require further information, please contact Cindy Loy, Regulatory Specialist at (317) 337-4655 or Paula McKinnies, Registration Assistant for this product, at (317) 337-4679.

Sincerely,

Rafael Herrera
Regulatory Leader
Regulatory Success – Americas
(317) 337-4672
(317) 337-4649 (FAX)

Enclosures

cc: [illegible]

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(Base Label):

Sapphire™

Specialty Herbicide

For postemergence control of annual and perennial broadleaf weeds in established turfgrass, including residential lawns, golf courses, sports fields, sod farms and around commercial buildings and other commercial turfgrass areas

Active Ingredient:

penoxsulam: 2-(2,2-difluoroethoxy)-N-(5,8-dimethoxy[1,2,4] triazol[1,5c]pyrimidin-2-yl)-6-(trifluoromethyl)benzenesulfonamide 3.68%

Other Ingredients 96.32%

Total 100.00%

Contains 0.31 lb of active ingredient per gallon

Container Use Directions



1. Remove the measuring chamber cap and induction seal. Replace cap and securely tighten. Tip container until liquid fills measuring chamber.
2. Return container to level position. No adjustment is needed.
3. Remove measuring chamber cap and dispense into proper application equipment.

For multiple dose measuring: Remove fill chamber cap and dispense according to markings on side of bottle.

Keep Out of Reach of Children

CAUTION

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful If Inhaled

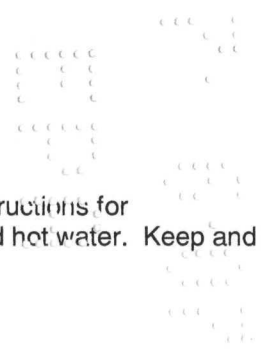
Avoid breathing spray mist.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

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



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(Page 1 through end):

Precautionary Statements

Hazards to Humans and Domestic Animals**CAUTION****Harmful If Inhaled**

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- Long-sleeved shirt and long pants
- Shoes plus socks

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

Engineering Controls

When handlers use closed systems, enclosed cabs, or aircraft 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 immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

First Aid

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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact 1-800-992-5994 for emergency medical treatment information.

Environmental Hazards

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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

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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 interval. 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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

Non-Agricultural Use Requirements

The requirements of 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.

Entry Restrictions for Non-WPS Uses: Keep unprotected persons out of treated areas until sprays have dried.

Storage and Disposal

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

Pesticide Storage: Store in cool dry place in original container.

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

Container Disposal (Plastic): Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

General Information

Sapphire™ specialty herbicide provides postemergence control of annual and perennial broadleaf weeds in established turfgrass, including residential lawns, golf courses, sports fields, sod farms and around commercial buildings and other commercial turfgrass areas. Susceptible weeds emerged at the time of application will be controlled. A spray volume of 20 gallons per acre (gpa) or more and uniform coverage are required for optimum performance. Sapphire is rainfast within one hour after application and has soil residual herbicidal activity dependent upon weed species, soil type, soil moisture (rainfall or irrigation after application) and the rate of application.

General Use Precautions and Restrictions

- Do not apply Sapphire to golf course putting greens or tees.
- Do not allow tank mixes of Sapphire to sit overnight.
- Do not apply Sapphire directly to, or otherwise permit Sapphire to come into contact with: flowers, ornamental shrubs or trees, or other desirable broadleaf plants, as serious injury may occur. Do not permit spray mists containing Sapphire to drift onto desirable broadleaf plants.
- Do not collect grass clippings for use as mulch around plants.
- Do not apply more than 0.5 pint of Sapphire (0.02 lb ai penoxsulam) per acre per application to perennial ryegrass and tall fescue unless some injury can be tolerated.
- Do not allow sprays of Sapphire to contact exposed suckers or exposed roots of shallow rooted trees and shrubs or injury may occur.

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- To minimize the potential for grass injury, additional applications should not be made within four weeks of a previous application.
- Do not apply more than 2.3 pints of Sapphire (0.09 lb ai penoxsulam) per acre per annual growing season.
- Tank mix a quality nonionic surfactant with all applications of Sapphire.
- Use this product strictly in accordance with the drift and runoff precautions on this label in order to minimize off-site exposure.
- **Chemigation:** Do not apply this product through any type of irrigation system.

Treatment on Turfgrass Species Not Listed on the Label for Sapphire

Users who wish to use Sapphire on turfgrass species not recommended on this label may determine the suitability for use by treating a small area at a recommended rate. Prior to treatment of larger areas, the treated area should be observed for any sign of herbicidal injury during 30 days of normal growing conditions to determine if the target turfgrass species is tolerant. The user assumes responsibility for any plant damage or other liability resulting from use of Sapphire on turfgrass species not recommended on this label.

Sapphire is recommended for use on the following established turfgrass species (numbers in parentheses (-) refer to footnotes below):

Established Cool Season Turfgrass (1)

Common Name	Scientific Name
bentgrass	<i>Agrostis</i> species
bluegrass, Kentucky	<i>Poa pratensis</i>
fescue, chewing	<i>Festuca rubra</i> var. <i>commutata</i>
fescue, creeping red	<i>Festuca rubra</i>
fescue, sheeps	<i>Festuca ovina</i>
fescue, tall (2)	<i>Festuca arundinaceae</i>
ryegrass, perennial (2)	<i>Lolium perenne</i>

Established Warm Season Turfgrass (3)

Common Name	Scientific Name
bahiagrass	<i>Paspalum notatum</i> var. <i>saurae parodi</i>
Bermudagrass (common or hybrid)	<i>Cynodon dactylon</i>
centipedegrass	<i>Eremochloa ophiuroides</i>
fescue, tall (growing in warm season areas) (2)	<i>Festuca arundinaceae</i>
kikuyugrass	<i>Pennisetum clandestinum</i>
seashore paspalum	<i>Paspalum vaginatum</i>
St. Augustinegrass	<i>Stenotaphrum secundatum</i>
zoysiagrass	<i>Zoysia japonica</i>
zoysiagrass	<i>Zoysia tenuifolia</i>

1. Use no more than 1 pint of Sapphire (0.04 lb ai penoxsulam) per acre per application.
2. Use Sapphire on these species at a maximum rate of 0.5 pint (0.02 lb ai penoxsulam) per acre per application and only if some injury can be tolerated. A slight yellowing of turfgrass may occur within two weeks of application. The discoloration is transient and is generally gone within four weeks of treatment under adequate growing conditions.
3. Use no more than 1.5 pints of Sapphire (0.06 lb ai penoxsulam) per acre per application.

Spray Drift Management

Avoiding spray drift is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. Low humidity and high temperatures increase the evaporation rate of spray droplets and, therefore, the likelihood of increased spray drift. Make applications only when there is little or no hazard from spray drift. The applicator, crop consultant,

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and grower are responsible for considering all of these factors when making the decision to apply this product.

Avoid all direct or indirect contact with non-target plants. Do not apply near desirable vegetation. Allow adequate distance between target area and desirable plants to minimize exposure.

Sensitive Areas: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., bodies of water, known habitat for threatened or endangered species, non-target plants) is minimal (e.g., when wind is blowing away from the sensitive areas).

Weeds Controlled or Suppressed

Generally, application rates at the lower end of the recommended rate range will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species, perennials, and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands and/or larger weeds), the higher rate within the rate range or repeat applications will be needed. Weeds growing in the absence of competition from other vegetation generally require higher rates or repeat applications to obtain satisfactory control or suppression.

Weeds Controlled or Suppressed		Rate	
		pt/acre	fl oz/1000 sq ft
burdock	ivy, ground	0.5 – 1.5	0.18 – 0.55
chickweed (common)	lambquarters		
chickweed (mouseear)	lespedeza, common		
clover, hop	matchweed		
clover, red	medic, black		
clover, white	plantain, broadleaf		
cocklebur, common	plantain, buckhorn		
coffeeweed	purslane, common		
common vetch	ragweed, common		
creeping beggarweed	round leaf mallow		
curly dock	sheep sorrel		
dandelion, common	shepherd's purse		
dollarweed	smartweed		
dwarf beggarweed	spotted catsear		
English lawn daisy ¹	spurweed		
false dandelion	Virginia buttonweed		
Florida betony	Virginia pepperweed		
goldenrod	wild violet		
hawkweed	woodsorrel, creeping		
henbit	woodsorrel, yellow		
kyllinga, annual and green (suppression only) ²	nutsedge, yellow ²	1 – 1.5	0.37 – 0.55
nutsedge, purple ²			

¹**Special use instructions for controlling English lawn daisy:**

- Late summer/fall applications of Sapphire have shown to provide better control of English lawn daisy than spring applications.
- Irrigate the day before applications are planned to assure turfgrass and English lawn daisy are not stressed.
- Make two to three applications on a 21-day interval at 0.25 to 0.5 pints of product per acre. Use the higher rate when heavy English lawn daisy populations are observed.
- Tank mix a quality nonionic surfactant with all applications of Sapphire.
- Heat and irrigation stress increase the potential for turfgrass injury. Poa annua, creeping bentgrass, Kentucky bluegrass and kikuyugrass are tolerant to Sapphire. Perennial ryegrass and tall fescue show some sensitivity. A slight yellowing of turfgrass may occur within two weeks of application. The

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discoloration is transient and is generally gone within two to four weeks of treatment under adequate growing conditions.

²Re-treatment may be necessary.

Mixing Instructions

Sapphire - Alone

Fill spray tank with water equal to 1/2 to 3/4 of the required spray volume. Start agitation. Add the required amount of Sapphire, then finish filling the tank. Continue agitation while filling spray tank to required volume and during application.

Sapphire - Tank Mix

Sapphire may be applied in tank mix combination with other herbicides labeled for use on turfgrass to control additional weeds. Tank mixing or using Sapphire with any other product not specifically and expressly authorized by the label shall be the exclusive risk of the user, applicator and/or application advisor. When tank mixing, follow label directions, including application rates, use precautions and limitations on each respective label. Continuous agitation is required for tank mixes.

Tank Mix Precautions:

- Do not exceed recommended application rates. Do not tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used.
- For other products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray equipment has been adequately cleaned.
- Always perform a (jar) test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: When tank mixing Sapphire with other materials, a compatibility test (jar test) using relative proportions of the tank mix ingredients should be conducted prior to mixing ingredients in the spray tank. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank mix combination should not be used.

Mixing Order: Fill the tank with water to 1/4 to 1/3 of the required spray volume. Start the agitation. Different formulation types should be added in the following order: dry flowables (DF), wettable powders (WP), aqueous suspensions (AS), flowables (F), or liquids (L). Allow each product type to completely disperse before adding another. Continue agitation and fill tank to 3/4 full, add the correct quantity of Sapphire and mix thoroughly. Finally, add any solution (S) formulations, agitate and finish filling. Maintain agitation during filling and during application. If spraying and agitation must be stopped before the tank is empty, suspended materials may settle to the bottom. It is important to resuspend all of the settled material before continuing application. A sparger agitator is particularly useful for this purpose. Do not allow tank mixes to set overnight.

Application Directions

Standard Volume Broadcast Application

Apply in a spray volume of 20 gpa or more (0.5 gallons or more per 1000 sq ft). Use a higher application volume when complete and uniform application must be ensured, i.e., when Sapphire is tank mixed with foliar fertilizers. If required, spray volume up to 200 gpa may be used.

Low Volume Application

Apply in a spray volume of 5 to 20 gpa (0.08 to 0.5 gallons per 1000 sq ft). Use low pressure and application equipment capable of delivering a uniform spray droplet. To improve spray coverage, the addition of a nonionic surfactant at a rate of 1/4 to 1/2 pint per acre is suggested. Use the higher rate of surfactant for lower rates of Sapphire and lower spray volumes.

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Spot Treatments and/or Hand-Held Sprayers

Spot treatments should be applied at rates equivalent to broadcast applications.

Hand-Held Sprayers: Hand-held or backpack sprayers may be used for spot applications of Sapphire if care is taken to apply the spray uniformly and at a rate equivalent to a broadcast application. Application rates in the table are based upon an area of 1000 sq ft. The amount of Sapphire (fl oz or mL) should be mixed with 1 gallon or more of water and applied to an area of 1000 sq ft. To calculate the amount of product required for larger areas, multiply the value (fl oz or mL) by the area to be treated in "thousands" of square feet, e.g., if the area to be treated is 3500 sq ft, multiply the table value by 3.5 (calculation: $3500 \div 1000 = 3.5$). An area of 1000 sq ft is approximately 10.5 x 10.5 yards (strides) in size.

Rates and Timing of Application

Apply Sapphire to turfgrass at the rate of 0.5 to 1.5 pint per acre as a ground broadcast treatment or spot treatment. Calibrate application equipment prior to use according to manufacturer's directions. Avoid skips or overlaps as poor weed control or plant injury may occur.

Sapphire Broadcast Rates

Rate pint/acre	Amount	
	fl oz ¹	mL
1.5	0.55	16.5
1	0.37	11.1
0.5	0.18	5.4

¹ 1 fl oz = 29.6 (30) mL

Best weed control results are obtained when Sapphire is applied to small, actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, at, or following time of application may reduce weed control. Broadleaf weed species germinate at different times.

Apply Sapphire to newly seeded cool season turfgrass only after the third mowing or after the turfgrass seedlings have tillered and developed an adequate secondary root system. Reseeding is not recommended for at least four weeks after application

This product may also be applied to newly established warm season turfgrass. Delay treatments until two to four weeks after sodding, sprigging or plugging.

Terms and Conditions of Use

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

Warranty Disclaimer

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent permitted by law, Dow AgroSciences **MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes),

