		PU 25 241-	262 RE 19 19			
. [	U.S. ENVIRONMENTAL PROTECTION AGENCY	EPA REGISTRATION NO. 241-362	NOV 1 3 1995			
	OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (WH-567) WASHINGTON, D.C. 20460	TERM OF ISSUANCE	NOV   3 1995			
	NOTICE OF PESTICIDE: REGISTRATION	NAME OF PESTICIDE PRODUCT				
	(Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended)	PURSUIT®Dimethenamid Herbicide				
	NAME AND ADDRESS OF REGISTRANT (Include ZIP code)					
	Γ	-1				
	American Cyanamid Co. P.O. Box 400 Princeton, NJ 08543					
	L					
	NOTE: Changes in labeling formula differing in substance fro submitted to and accepted by the Registration Division prior product always refer to the above U.S. EPA registration numb	to use of the label in commerce. In				
i c	On the basis of information furnished by the registrant, the a the Federal Insecticide, Fungicide, and Rodenticide Act.	bove named pesticide is hereby Ro	egistered/Reregistered under			
	A copy of the labeling accepted in connection with this Regi	stration/Reregistration is returned	i herewith.			
Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to prote health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pericide in accordance with the Act. The acceptance of any name in connection with the registration of a product under the Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been cover by others.						
	This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:					
7	1. Submit/cite all data required for registration/ reregistration of your product under FIFRA Section 3(c)(5) and sec. 4 when the Agency requires all registrants of similar products to submit such data.					
نې ز	<ol> <li>Make the labeling changes you release the product for shipm</li> </ol>	s listed below befor ert:	e you			
	a. Add the phrase "EPA by your label before you shipment.					
	3. Submit five (5) copies of your final printed labeling before you release the product for shipment.					
	If these conditions are not complied with, this registra- tion will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.					
	A stamped copy of the label is enclosed for your records.					
	ATTACHMENT IS APPLICABLE					
	SIGNATURE OF APPROVING OFFICIA		NOV 1 3 1995			
	EPA Form 8570-6 (Rev. 5-76) PREVIOUS EDITION	MAY BE USED UNTIL SUPPLY IS E				

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# PURSUIT<sup>®</sup>/Dimethenamid herbicide

# FOR USE IN FIELD CORN<sup>\*</sup> AND SOYBEANS \*(Apply only on IMI-Corn<sup>™</sup> hybrids)

#### **ACTIVE INGREDIENTS:**

lmazethapyr ( <u>+</u> )-2-[4,5-dihydro-4-methyl-4-(1-methyl-ethyl)-	
5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid	5.21%
Dimethenamid: 2-chloro-N-[(1-methyl-2-methoxy)ethyl]-	
N-(2,4-dimethyl-thien-3-yl)-acetamide	62.52%
INERT INGREDIENTS	<u>32.27%</u>
TOTAL	100.0%

PURSUIT/dimethenamid contains 6.5 pounds of active ingredients per gallon (6 pounds ai of dimethenamid and 0.5 pounds ai of imazethapyr).

EPA Reg. No: 241-

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EPA Est. No.

# KEEP OUT OF REACH OF CHILDREN

#### DANGER!/PELIGRO!

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

# STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady gentle stream of water for 15 minutes. Get medical attention

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED: Drink promptly a large quantity of milk, egg white gelatin solution, or if these are not available, large quantities of water. Avoid alcohol. Do not induce vomiting. Get medical attention. Note to Physician: Probable mucosal damage may contraindicate use of gastric lavage. IF INHALED: Remove victim to fresh air

In case of an emergency endangering life or property involving this product, call collect, day or night, area code 201-835-3100.

See Page 3 for Additional Precautionary Statements

# AMERICAN CYANAMID COMPANY AGRICULTURAL PRODUCTS DIVISION CROP PROTECTION CHEMICALS DEPARTMENT WAYNE, NJ 07470 ©1994

Net Contents: <sup>®</sup>Registered Trademark of American Cyanamid Company

#### ACCEPTED with COMMENTS In EPA Letter Dated

NOV 1 3 1995

Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, A the posticide registered under EPA Reg. No.

1 10/26/95

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#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)

#### **DANGER!/PELIGRO!**

Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed, inhaled or absorbed through the skin. DO NOT get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist. Use with adequate ventilation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### **Personal Protection Equipment (PPE):**

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

# Applicators and other handlers must wear:

Coveralls over long-sleeved shirt and long pants Chemical-resistant gloves, such as Barrier Laminate or butyl rubber  $\geq 14$  mils Chemical-resistant footwear plus socks Protective eyewear Chemical-resistant headgear for overhead exposure Chemical-resistant apron when cleaning equipment, mixing or loading

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **User Safety Recommendations:**

Users should:

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- Wash hands before cating, drinking, chewing gum, using tobacco or using the toilet
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and personal clothing.

- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# 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 by disposal of equipment washwaters or rinsate. DO NOT apply when weather conditions (gusty winds, high temperatures, low humidity, and when a temperature inversion exists) favor drift from treated areas.

This product has properties that may result in ground-water contamination. Application in areas where soils are permeable or coarse and groundwater is near the surface may result in ground-water contamination. Following application and during rainfall events that cause runoff, this chemical may reach surface water bodies including streams, rivers, and reservoirs.

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Care must be taken when using this product to prevent 1) back siphoning into wells, 2) spills, 3) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

# **DIRECTIONS FOR USE**

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

This labeling must be in the possession of the user at the time of pesticide application.

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.

Observe all cautions and limitations in this label and on the labels of products used in combination with PURSUIT/dimethenamid herbicide. Do not use PURSUIT/dimethenamid other than in accordance with the instructions set forth on this label. The use of PURSUIT/dimethenamid not consistent with this label can result in injury to crops, animals, or persons. Keep container closed to avoid spills and contamination.

DO NOT apply this product through any type of irrigation system.

DO NOT apply this product on popcorn or sweet corn.

# 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 fains, 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. Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 over long-sleeved shirt and long pants

Chemical-resistant gloves, such as Barrier Laminate or butyl rubber  $\geq 14$  mils

Chemical-resistant footwear plus socks

Protective eyewcar

Chemical-resistant headgear for overhead exposure

#### STORAGE AND DISPOSAL

#### PROHIBITIONS:

KEEP FROM FREEZING.

SHAKE WELL BEFORE USING.

DO NOT contaminate water, food, or feed by storage or disposal.

#### **STORAGE:**

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Store in original container away from fertilizer, feed, or foodstuffs and separate from other pesticides.

# **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:**

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

#### DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on research and field use. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, herbicide resistant weed populations, or the use of, or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company shall not be responsible for losses or damages resulting from use of this product in any manner not set forth on this label. User assumes all risks associated with the use of this product in any manner not specifically set forth on this label.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above. CYANAMID DOES NOT MAKE OR AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED AND EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

BUYER'S EXCLUSIVE REMEDY AND AMERICAN CYANAMID'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF PURSUIT/dimethenamid. In no case shall Cyanamid or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

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#### Uses With Other Products (Tank-Mixes)

If this product is used in combination with any other product except as specifically recommended in writing by American Cyanamid Company then American Cyanamid Company shall have no liability for any loss, damage or injury arising out of its use in any such combination not so specifically recommended. If used in combination recommended by American Cyanamid Company, the liability of American Cyanamid Company shall in no manner extend to any damage, loss or injury not directly caused by the inclusion of the American Cyanamid Company product in such combination use, and in any event shall be limited to return of the account of the purchase price of the American Cyanamid Company product.

#### GENERAL INFORMATION

PURSUIT/dimethenamid is a selective herbicide for control of most annual grasses and certain broadleaf weeds in soybeans and IMI-Corn. PURSUIT/dimethenamid kills weeds by root and/or foliage uptake and rapid translocation to the growing points. Adequate soil moisture is important for optimum PURSUIT/dimethenamid activity. When adequate soil moisture is present, PURSUIT/dimethenamid will provide residual control of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

Apply PURSUIT/dimethenamid herbicide on soybeans or on selected field corn hybrids (IMI-Corn) warranted by the seed company to possess resistance/tolerance to direct application of PURSUIT herbicide. DO NOT apply PURSUIT/dimethenamid to corn hybrids which lack genetic resistance/tolerance to PURSUIT herbicide. Contact your seed supplier, chemical dealer or American Cyanamid to obtain information regarding IMI-Corn hybrids.

PURSUIT/dimethenamid herbicide can be applied preplant incorporated, preplant, preemergence or early postemergence to IMI-Corn hybrids up to 8" tail. PURSUIT/dimethenamid can be applied preplant incorporated, preplant, or early postemergence to soybeans up to the third trifoliate stage. PURSUIT/dimethenamid provides effective weed control in conventional and reduced tillage (conservation tillage, minimum tillage), and no-till systems. This product will provide most effective weed control when applied (by ground or aerial application) and subsequently incorporated into the soil by rainfall, sprinkler irrigation, or mechanical tillage prior to weed seedling emergence from soil.

Crops growing under stressful environmental conditions can exhibit various injury symptoms which may be more pronounced if herbicides are used. Corn plants treated with PURSUIT/dimethenamid may exhibit yellowing on new growth. Normal growth and appearance should resume within 1 to 2 weeks. Occasionally, soybean internode shortening may occur following PURSUIT/dimethenamid applications. These effects occur infrequently and are temporary. Normal growth and appearance should resume within 1 to 2 weeks. If extreme conditions of high rainfall and extended periods of water saturated soil occur during soybean germination or early seedling development, PURSUIT/dimethenamid use may result in temporary growth suppression. These effects will not affect crop yields.

Use of PURSUIT/dimethenamid herbicide in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

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Following the use of this product and chemically related products with the same mode of action, naturally occurring biotypes\* of some of the weeds listed on this label cannot be controlled by this and related products. This product should be tank-mixed or applied sequentially with an appropriate registered herbicide having a different mode of action to ensure control of resistant biotypes.

\* A weed biotype is a naturally occurring individual within a given species that has a slightly different, but distinct, genetic makeup from other individuals.

Replanting: If replanting is necessary in a field previously treated with PURSUIT/dimethenamid, the field may be replanted to soybeans or IMI-Corn. Rework the soil no deeper than the treated zone. Do not apply a second treatment of PURSUIT/dimethenamid.

# USE RATE (1 PINT PER ACRE)

Apply PURSUIT/dimethenamid herbicide at a broadcast rate of 1 pint per acre for all methods of application: preplant incorporated, preplant surface, preemergence or early postemergence (up to 8" tall corn; up to the third trifoliate stage of soybean). At this broadcast rate, one gallon of PURSUIT/dimethenamid will treat 8 acres of soybeans or IMI-Corn.

## PURSUIT/dimethenamid HERBICIDE USE AREA

DO NOT apply PURSUIT/dimethenamid to soybeans or IMI-Corn in North Dakota or in Minnesota north of state highway 210.

# MIXING INSTRUCTIONS

Fill the spray tank one-fourth to one-half full with clean water. While agitating, add the required amount of product and then fill the remainder of the tank with water. Maintain agitation while spraying to ensure a uniform spray mixture.

# Postemergence Applications of PURSUIT/dimethenamid require the addition of an adjuvant and a liquid fertilizer solution.

#### I. ADJUVANTS

SURFACTANTS: Use a non-ionic surfactant containing at least 80% active ingredient. Apply the surfactant at the rate of 1 quart per 100 gallons. An organo-silicone surfactant may be used in place of a non-ionic surfactant.

OR

CROP OIL CONCENTRATE: Instead of a surfactant, a petroleum or vegetable seed based oil concentrate (such as SUN-IT II<sup>TM</sup>) may be used. SUN-IT II is recommended when weeds are under moisture or temperature stress. Use SUN-IT II or other methylated seed oils at the rate of 1.5 to 2 pints per acre (use the higher rate when weeds are at the maximum label size), or use a crop oil concentrate at 2 pints per acre.

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# II. LIQUID FERTILIZER SOLUTION

Recommended nitrogen based fertilizers include liquid fertilizers (such as 28%N, 32%N or 10-34-0) at the rate of 1-2 quarts per acre. Use the higher rate when weeds are under moisture or temperature stress. Instead of a liquid fertilizer, spray grade ammonium sulfate may be used at the rate of 2.5 lb. per acre.

## Tank-Mix Combinations With Other Herbicides

When tank-mixing PURSUIT/dimethenamid with recommended herbicides, add the other herbicides and adjuvants in the following order while agitating.

- 1. Fill spray tank 1/4 to 1/2 full with clean water.
- 2. Add soluble packet products and thoroughly mix.

3. Add WP (wettable powder), DG (dispersible granule), DF (dry flowable) or LF (liquid flowable) formulations.

- 4. Add aqueous solution products.
- 5. Add PURSUIT/dimethenamid.
- 6. Add other EC (emulsifiable concentrate) products.
- 7. Add surfactant to the spray tank.
- 8. Add liquid fertilizer.
- 9. While agitating, fill the remainder of the tank with water.

To avoid injury to sensitive crops, spray equipment used for PURSUIT/dimethenamid herbicide applications must be drained and thoroughly cleaned with water before being used to apply other products.

#### SPRAYING INSTRUCTIONS

DO NOT apply when wind velocity is greater than 10 mph, or when spray may be carried to sensitive crops. Sensitive crops include, but are not exclusive to, leafy vegetables, sugar beets, grain sorghum and cotton.

#### Ground Applications:

Uniformly apply with properly calibrated ground equipment in 10 or more gallons of water per acre. A spray pressure of 20 to 40 psi is recommended.

To ensure thorough coverage, use a minimum of 20 gallons of water per acre when applying PURSUIT/dimethenamid to minimum or no-till crops. Use higher gallonage for fields with dense vegetation or heavy crop residues.

Adjust the boom height to ensure proper coverage of weed foliage (according to the manufacturer's recommendation). Use only flat-fan nozzle tips for postemergence applications.

Avoid overlaps when spraying.

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#### Soil Applications With Liquid Fertilizers

PURSUIT/dimethenamid can be applied to the soil in liquid fertilizers to soybeans or IMI-Corn. Follow all PURSUIT/dimethenamid label recommendations regarding incorporation, timing of application, special instructions and precautions. Apply treatments in 20 or more gallons of liquid fertilizer per acre with ground equipment. Always test the compatibility of PURSUIT/dimethenamid with the liquid fertilizer before mixing in the spray tank.

# Soil Applications With Dry Bulk Fertilizer:

PURSUIT/dimethenamid herbicide may be impregnated on or coated onto dry bulk granular fertilizer carriers for preplant, preplant incorporated or preemergence applications. When applied as directed, PURSUIT/dimethenamid/dry bulk fertilizer mixtures provide weed control equal to that provided by the same rates of PURSUIT/dimethenamid applied in water or liquid fertilizer.

DO NOT impregnate PURSUIT/dimethenamid onto ammonium nitrate, potassium nitrate, or sodium nitrate fertilizers or fertilizer blends or limestone because these materials are incompatible with the herbicide. Do not impregnate single superphosphate (0-0-20) or triple superphosphate (0-0-46) with PURSUIT/dimethenamid. A minimum of 200 pounds and a maximum of 750 pounds of dry bulk fertilizer impregnated with the recommended amount of PURSUIT/dimethenamid, excluding the weight of ammonium nitrate or limestone, must be applied per acre. Application must be made uniformly to the soil to prevent possible crop injury and offer satisfactory weed control. A shallow (1-2 inch) incorporation is desirable for improved weed control. Deepef incorporation may result in unsatisfactory weed control.

Addition of a drying agent may be necessary if the fertilizer/herbicide blend is too wet for uniform application due to high humidity, high urea concentration, and/or low fertilizer use rate. Slowly add the drying agent to the blend until a flowable mixture is obtained.

Under some conditions, fertilizer impregnated with PURSUIT/dimethenamid may clog air tubes or deflector plates on pneumatic application systems. Mineral oil may be added to PURSUIT/dimethenamid before blending with fertilizer to reduce plugging. DO NOT use drying agents when mineral oil is used. To avoid separation of PURSUIT/dimethenamid and mineral oil mixes in cold temperatures, either keep mixture heated or agitated prior to blending with fertilizer.

Follow all PURSUIT/dimethenamid label recommendations regarding application and incorporation, special instructions and precautions. Apply PURSUIT/dimethenamid/dry bulk ferti <sup>1</sup>zer mixtures only with ground equipment.

All individual state regulations relating to dry bulk fertilizer, registration, labeling, and application are the responsibility of the individual and/or company selling the PURSUIT/dimethenamid/dry bulk fertilizer mixtures.

Apply PURSUIT/dimethenamid at the rate of 1 pint per acre. Use the following formula to determine the amount of PURSUIT/dimethenamid to be impregnated on a ton of dry bulk fertilizer based on the rate of fertilizer which will be applied per acre.

# FORMULA TO DETERMINE HERBICIDE RATES

Fluid Ounces or				Fluid Ounces or Pounds
Pounds Herbicide/Acre	х	2000	=	of Herbicide per Ton of
Pounds of Fertilizer/Acre				Fertilizer

# **Aerial Application:**

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Uniformly apply with properly calibrated aerial equipment in 5 or more gallons of water per acre. When applied POSTEMERGENCE, the addition of a non-ionic surfactant AND fertilizer solution are required for optimum weed control. Apply a non-ionic surfactant at the rate of 1 quart per 100 gallons of spray mixture OR a crop oil concentrate at the rate of 1.5 - 2 pints per acre AND a liquid fertilizer at the rate of 1 quart per acre. (See instructions under APPLICATION INSTRUCTIONS - POSTEMERGENCE).

To avoid injury to sensitive crops from drift, aerial applicators must adhere to the following SPECIAL AERIAL USE DIRECTIONS AND PRECAUTIONS.

- Nozzle height above ground must be a maximum of 10 feet.
- Nozzles must be pointed toward the rear of the aircraft. The downward angle of the nozzle should not be greater than 20 degrees.
- To minimize wing-tip vortex roll, nozzles or spray boom must not be located any closer to end of wing or rotor than three-fourths the distance from the center of the aircraft.
- Use a maximum spray pressure of 40 psi.
- A buffer zone must be established between the area to be sprayed and sensitive crops.
- DO NOT spray when wind velocity is greater than 5 mph. Coarse sprays (larger droplets) are less likely to drift

Applicator is responsible for any loss or damage which results from spraying PURSUIT/dimethenamid in a manner other than recommended in this label. In addition, applicator must follow all applicable state and local regulations and ordinances in regard to spraying.

## WEEDS CONTROLLED

When applied as directed, PURSUIT/dimethenamid will control or reduce competition from the weeds listed below. Refer to the MIXING INSTRUCTIONS section on page 4 for recommendations when weeds are at the maximum recommended growth stage, or are under stress.

# NOTE: C = Control, R = Reduced Competition

(The number under Maximum Leaf Stage indicates the MAXIMUM number of leaves at which weeds should be sprayed postemergence).

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# BROADLEAF WEEDS

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	SOIL APPLIED	EARLY POSTEMERGENCE		
Weeds Controlled		Maximum Leaf Stage	Size (inches)	
Alligator weed		4	1-3	
Anoda, spurred	С	2	1-3	
Attichoke, Jerusalem	(	2 8	6-10	
Buffalobur	C*	R	1-3	
Bristly starbur	C C	2	1-2	
Carpetweed	С	2	1-2	
Cocklebur, common	R	8	1-8	
Galinsoga	к С	o	1-0	
Jimsonweed	C C*	•	1 2	
Kochia	C	4	1-3	
	C C*	4	1-3	
Lambsquarters, common		R	1-2	
Mallow, Venice Marshelder	R C	,		
	C	4	1-3	
Morningglory	n	2		
entireleaf	R	2	1-2	
ivyleaf	R	2	1-2	
pitted	R	2	1-2	
smailflower	С	4	1-3	
tali	R	2	1-2	
Mustard sp.	C	4	1-3	
Nightshade				
black	С	4	1-3	
Eastern black	С	4	1-3	
hairy	С	4	1-3	
Pigweed				
palmer	С			
prostrate	C	8	1-8	
redroot	С	8	1-8	
smooth	C	8	1-8	
spiny	С	8	1-8	
tumble	С	8	1-8	
Poinsettia, wild	С			
Puncturevine	С			
Purslane, common	С			
Pusley, Florida	С			
Sida, prickly	C C*			
Ragweed				
common	R	-4	1-3	
giant	R	4	1-3	
Sage, barnyard	• *	Ŕ	1-3	
Smartweed		i.	• ./	
ladysthumb	С	4	1-3	
Pennsylvania	c	-4	1-3	
Spurge	τ.	* <del>*</del>	1-0	
prostrate	С	4	1-3	
spotted		4	1-3	
Sunflower	C*			
Velvetleaf	C C* C*	4	1-3	
Thistle, Canada	L	4	1-3	
Waterhemp, tall	С	R 4	1-3	
waterienp, tan	<b>C</b> .	-4	1-3	

\*When PURSUIT/dimethenamid is soil applied, these weeds are more consistently controlled by preplant incorporated treatments.

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# GRASS WEEDS

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	SOIL APPLIED	POSTEMERGENCE	
Weeds Controlled		Maximum	Size
		Leaf Stage	(inches)
Barnyardgrass	С	3	1-3
Crabgrass,			
large	С	3	1-3
smooth	С	3	1-3
Cupgrass,			
woolly		3	1-3
southwestern		3	1-3
Foxtail,			
giant	С	6	1-6
green	С	3	1-3
yellow	С	3	1-3
Goosegrass	С		
Johnsongrass,			
seedling	С	6	1-8
rhizome		R	6-12
Millet, wild proso	R	R	1-3
Panicum,			
fall	R		
Texas	R		
Red rice		3	1-3
Sandbur, field	R	R	<u>≤</u> 1
Shattercane	R	6	1-8
Signalgrass, broadleaf	R	4	1-8
Sorghum almum	R	6	1-3
SEDGES			
Nutsedge			
puple	R	R	1-3
vellow	R	R	1-3

DO NOT count cotyledon leaves when determining weed stage of growth.

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#### **APPLICATION INFORMATION**

# SOIL APPLICATIONS

PURSUIT/dimethenamid provides effective weed control in conser \_\_\_\_\_\_\_, e systems designed to meet conservation compliance requirements. PURSUIT/dimethenamic \_\_\_\_\_\_\_applied prior to planting (up to 30 days prior to planting) or at planting in conventional, mir\_\_\_\_\_\_ um till or no-till production systems. PURSUIT/dimethenamid can be applied as an early preprint, preplant incorporated, or preemergence treatment in soybeans and IMI-Corn. The application method of choice will depend on the anticipated weed spectrum and the preference of the applicator.

Adequate soil moisture is required for optimum activity. Rainfall or overhead irrigation is necessary to move PURSUIT/dimethenamid into the weed germination zone if incorporation equipment is not used. The amount of rainfall or irrigation required following application depends on existing soil moisture, soil texture and organic matter content. Sufficient water to moisten the soil to a depth of 2 inches is normally adequate. If adequate moisture is not received within 7 days after treatment, a cultivation is recommended to control escaped weeds. When adequate moisture is received after dry conditions, PURSUIT/dimethenamid will provide residual control of susceptible germinating weeds; activity on established weeds will depend on the weed species and the location of its root system in the soil.

In early preplant applications (15-30 days prior to planting) or on fine textured soils or soils with greater than 3% organic matter or in areas where average annual rainfall ( or rainfall + irrigation) typically exceeds 40 inches, the grower may tank-mix with Frontier<sup>™</sup> herbicide (up to 12 ounces). A burndown tank-mix partner such as Roundup<sup>™</sup> or Gramoxone Extra<sup>™</sup> may be used when weeds are present at the time of application prior to crop emergence. Refer to the respective labels for rates, methods of application, proper timing, weeds controlled, restrictions, and precautions.

PURSUIT/dimethenamid controls weeds by uptake by weed roots and translocation to the growing points where it stops weed growth. Susceptible weeds may emerge, growth will stop and the weeds will either die or are not competitive with the crop.

## **Preplant Incorporated Applications**

Apply PURSUIT/dimethenamid and incorporate thoroughly to a depth of 1 to 2 inches. Use a harrow, field cultivator, rolling cultivator, finishing disk, or other implement capable of giving uniform shallow incorporation. If crops are planted on beds, apply and incorporate after bed formation using PTO-driven equipment or a rolling cultivator. When applied to beds, maintain PURSUIT/dimethenamid in the surface 1 to 2 inches of the finished beds. Avoid deeper incorporation or reduced weed control and/or crop injury may occur. Application may be made up to 30 days prior to planting soybeans or IMI-Corn.

#### Preplant

Broadcast apply PURSUIT/dimethenamid to the soil surface up to 30 days prior to planting or during planting. Rainfall, sprinkler irrigation, or shallow mechanical incorporation after application is required to inove this product into the upper soil surface where weed seeds germinate. If adequate rainfall or irrigation does not occur and weed seedling emergence begins, a shallow cultivation or rotary hoeing will improve performance.

### Preemergence

Broadcast apply PURSUIT/dimethenamid to the soil surface after planting and before crop emergence. Rainfall, sprinkler irrigation, or shallow mechanical incorporation after application is required to move this product into the upper soil surface where weed seeds germinate. If adequate rainfall or irrigation does not occur and weed seedling emergence begins, a shallow cultivation or rotary hoeing will improve performance.

# NO-TILL OR REDUCED TILLAGE

For use in minimum tillage or no-tillage production, application of PURSUIT/dimethenamid may be made up to 30 days prior to planting, during or after planting. To ensure thorough coverage, use a minimum of 20 gallons of water per acre. Use higher gallonage for fields with dense vegetation or heavy crop residues. Adjust the boom height to ensure proper coverage of weed foliage (according to the manufactures recommendation). The nozzle spacing on the boom should be 20 inches. Use only standard flat-fan nozzle tips. Use ground equipment only.

In early preplant applications (15-30 days prior to planting) or on fine textured soils or soils with greater than 3% organic matter or in areas where average annual rainfall ( or rainfall + irrigation) typically exceeds 40 inches, the grower may tank-mix with Frontier<sup>TM</sup> (up to 12 ounces). A burndown tank-mix partner such as Roundup<sup>TM</sup> or Gramoxone Extra<sup>TM</sup> may be used when weeds are present at the time of application prior to crop emergence. Refer to the respective labels for rates, methods of application, proper timing, weeds controlled, restrictions, and precautions. Use ground equipment only.

## EARLY POSTEMERGENCE APPLICATIONS

PURSUIT/dimethenamid is effective in controlling weeds in conservation tillage as well as in conventional production systems. Apply PURSUIT/dimethenamid herbicide to IMI-corn up to 8" tall and/or to soybeans up to the third trifoliate stage. Apply PURSUIT/dimethenamid before weeds exceed a height of 3", unless otherwise indicated (see Weed Control Tables). Apply PURSUIT/dimethenamid to crops and weeds that are actively growing.

An adjuvant (either a surfactant or a crop oil concentrate) and a liquid fertilizer must be added to the spray solution for optimum weed control activity. See the ADDITIVE section under MIXING INSTRUCTIONS for specific instructions.

When PURSUIT/dimethenamid is applied postemergence, absorption will occur through both the roots and foliage. Susceptible weeds stop growing and either die or are not competitive with the crop. PURSUIT/dimethenamid not only controls many existing brc\_dleaf and grass weeds when applied early postemergence, it also provides control of susceptible weeds thr\_may emerge after application.

For maximum weed control, cultivate 7 - 10 days following a postemergence PURSUIT/dimethenamid application. This timely cultivation will enhance residual weed control, especially under dry conditions.

If air temperatures reach or stay below  $40^{\circ}$  for 10 or more hours, delay a PURSUIT/dimethenamid application for 48 hours from the time temperatures increase above  $40^{\circ}$  or until weeds are actively growing. Unusually cool temperatures ( $40^{\circ}$  or less) reduce photosynthesis and transpiration. This reduces the uptake and translocation (and effectiveness) of PURSUIT/dimethenamid in weeds.

PURSUIT/dimethenamid should be applied a minimum of one hour before rainfall or overhead irrigation.

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# PURSUIT/DIMETHENAMID TANK-MIXES AND SEQUENTIAL USE PROGRAMS

# IMI-CORN

PURSUIT/dimethenamid may be applied prior to, in a tank mix with, or following the use of one or more of the following herbicides: atrazine, Banvel<sup>™</sup>, Bladex<sup>™</sup>, Buctril<sup>™</sup>, Clarity<sup>™</sup>, Extrazine<sup>™</sup> II, Gramoxone <sup>™</sup> Extra, Princep<sup>™</sup>, PROWL, Roundup<sup>™</sup> or 2,4-D

#### SOYBEAN

PURSUIT/dimethenamid may be applied prior to, in a tank mix with, or following the use of one or more of the following herbicides: Gramoxone Extra, linuron (Lorox<sup>™</sup> and others), metribuzin (Lexone<sup>™</sup> or Sencor), PROWL, Roundup, Sonalan<sup>™</sup>, trifluralin (Treflan<sup>™</sup> and others) or 2,4-D (early preplant only). In addition, PURSUIT/dimethenamid may be used prior to herbicides registered for post-emergence grass or broadleaf weed control in soybcans such as Basagran<sup>™</sup>, Cobra<sup>™</sup>, Fusilade<sup>™</sup>, Galaxy<sup>™</sup>, Poast<sup>™</sup>, Select<sup>™</sup> and Storm<sup>™</sup>.

When PURSUIT/dimethenamid is used in combination with another herbicide, refer to the respective label for rates, methods of application, proper timing, weeds controlled, restrictions and precautions. Always use in accordance with the more restrictive label restrictions and precautions. No label dosages should be exceeded. PURSUIT/dimethenamid cannot be mixed with any product containing a label prohibiting such mixtures.

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# **ROTATIONAL CROP GUIDELINE**

The following rotational crops may be planted after applying PURSUIT/dimethenamid at the recommended rate: (Planting earlier than the recommended interval may result in crop injury).

- Anytime
   Soybeans
   IMI-Com (resistant/tolerant to PURSUIT)
- Four months after PURSUIT/dimethenamid application: Rye Wheat
- Eight and one-half months after PURSUIT/dimethenamid application:
   Field corn
   Field corn grown for seed\*
   Edible beans and peas (other than lima beans and Southern peas)
- Nine and one-half months after PURSUIT/dimethenamid application: Barley Tobacco
- 5. Eighteen months after PURSUIT/dimethenamid application: Alfalfa Cotton Lettuce Oats
  - Popcorn Safflower Sorghum Sweet corn

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- 6. Twenty six months after PURSUIT/dimethenamid application. All crops not listed elsewhere in this ROTATIONAL CROP GUIDELINE.
- Forty months after PURSUIT/dimethenamid application.
   Sugar beets
   Red table beets
- \* Before application to seed corn, first verify with your local corn seed company (supplier) the PURSUIT/dimethenamid selectivity of your inbred line. This precaution will help avoid potential injury to sensitive varieties.

Use of PURSUIT/dimethenamid herbicide in accordance with label directions is expected to result in normal growth of rotational crops in most situations; however, various environmental and agronomic factors make it impossible to eliminate all risks associated with the use of this product and, therefore, rotational crop injury is always possible.

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# IMI-Corn

There should be an interval of at least 45 days between an application of PURSUIT/dimethenamid and corn harvest (silage, fodder, or grain). DO NOT graze or feed treated corn forage, silage, fodder, or grain for at least 45 days after an application of PURSUIT/dimethenamid.

Al! soil insecticides, including labeled banded or in-furrow applications, may be used in combination with Pioneer imidazolinone resistant (IR) corn hybrids.

Imidazolinone tolerant hybrids from other seed companies may occasionally exhibit injury symptoms when soil insecticides are used in combination with PURSUIT/dimethenamid. Use banded applications of COUNTER<sup>®</sup> 15G or THIMET<sup>®</sup> in combination with PURSUIT/dimethenamid application. COUNTER<sup>®</sup> CR<sup>®</sup> may be used in furrow or banded. DO NOT USE COUNTER 15G soil insecticide in-furrow with imidazolinone tolerant hybrids. American Cyanamid has not tested all hybrids in which the imidazolinone tolerance trait is claimed and cannot be responsible for factors which are beyond its control, such as growing conditions, environmental conditions, grower practices and the specific genetics of each hybrid tolerance to PURSUIT and insecticide applications.

# Soybeans

There should be an interval of at least 85 days between an application of PURSUIT/dimethenamid and soybean harvest.

PURSUIT/dimethenanid applications should be made before soybean bloom.

Do not graze or feed treated sovbean forage, hay or straw to livestock.

Except where stated on a Supplemental Label or in this label, DO NOT apply to soybeans products containing chlorimuron ethyl (Classic, Canopy<sup>TM</sup>, Gemini<sup>TM</sup>, Lorox Plus<sup>TM</sup>, Preview<sup>TM</sup>, etc.) imazaquin (SCEPTER<sup>®</sup>, SQUADRON<sup>®</sup>, TRI-SCEPT<sup>®</sup>, SCEPTER<sup>®</sup> O.T.<sup>®</sup>, SCEPTER<sup>®</sup> 70DG) or products containing imazethapyr (PURSUIT<sup>®</sup> DG, PURSUIT<sup>®</sup> PLUS, PASSPORT<sup>®</sup>) the same year as PURSUIT/dimethenamid or injury to follow crops may occur.

DO NOT tank-mix PURSUIT/dimethenamid with clomazone containing herbicides (Command<sup>TM</sup> or Commence<sup>TM</sup>). PURSUIT/dimethenamid may be applied postemergence following a soil application of Command or Commence.

## General

Only rotational crops harvested at maturity may be used for feed or food.

In the event of a crop loss due to weather, soybeans or IMI-Corn can be replanted DO NOT work the soil deeper than 2 inches.

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<sup>™</sup>Command and Commence are trademarks of FMC Corporation

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For additional information regarding the use of PURSUIT/dimethenamid herbicide, call telephone no. 800-942-0500.

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