

100-907

06/06/2000

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  
100-907

Date of Issuance:  
JUN 6 2000  
Date of Expiration:  
12/31/2000

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration

Term of Issuance:  
Conditional

Name of Pesticide Product:  
Discover™ Herbicide

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Novartis Crop Protection, Inc.  
P.O. Box 18300  
Greensboro, NC 27419-8300

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this 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 covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c) (7) (C) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product when the Agency requires all registrants of similar products to submit such data.
2. Submit data to fulfill the following guideline requirements as specified in the Health Effects Division's May 15, 2000 risk assessment of Clodinafop-propargyl on wheat (copy enclosed). These data must be submitted by June 1, 2003. Refer to the review for detailed information concerning the nature of the deficiencies and the information/data that must be submitted:
  - (a) Acute Neurotoxicity Study in Rats (OPPTS 870.6200)
  - (b) Subchronic Neurotoxicity Study in Rats (OPPTS 870.6200)
  - (c) Developmental Neurotoxicity Study in Rats (OPPTS 870.6300)
  - (d) In vitro Cytogenetic Assay (OPPTS 870.5375)
  - (e) Nature of the Residue in Plants (OPPTS 860.1300)
  - (f) Residue Analytical Methods (OPPTS 860.1340)
  - (g) Storage Stability Data (OPPTS 860.1380)
  - (h) Magnitude of the Residue in Plants (OPPTS 860.1500)

Signature of Approving Official:

Date:  
JUN 6 2000

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Additional deficiencies were noted in HED's review. These deficiencies either have already been adequately addressed (Proposed Uses/Guideline 860.1200); are not being required at this time (Nature of the Residue in Livestock/Guideline 860.1300); or are reserved pending review of the data required above (Magnitude of the Residue in Processed Food/Guideline 860.1520). The data pertaining to the Nature of the Residue in Livestock are not being required at this time, since the Agency has concluded that tolerances in animal commodities are not required in connection with the use of clodinafop-propargyl on wheat. If it is determined in the future that animal commodity tolerances are needed, you must fulfill this guideline requirement (860.1300) at that time. Finally, as noted in HED's review, if you wish to amend the label to include shorter rotational crop intervals, you must submit a new Confined Rotational Crop study (Guideline 860.1850) in support of the amendment. Pending the results of the new study, a Field Accumulation Study (Guideline 860.1900) may also be required.

3. Submit data to fulfill the following guideline requirements as specified in the Environmental Fate and Effects Division's January 27, 2000 risk assessment of Clodinafop-propargyl on wheat (previously sent to Novartis). These data must be submitted by June 1, 2003. Refer to the review for detailed information concerning the nature of the deficiencies and the information/data that must be submitted:

- (a) Hydrolysis (Guideline 161-1) - **Clodinafop-propargyl**
- (b) Photolysis in Water (Guideline 161-2) - **Clodinafop-propargyl**
- (c) Anaerobic Soil Metabolism (Guideline 162-2) - **Clodinafop-propargyl and the metabolites CGA-193469 and CGA-302371**
- (d) Adsorption/Desorption (Guideline 163-1) - **Clodinafop-propargyl and the metabolites CGA-193469 and CGA-302371**
- (e) Field Dissipation (Guideline 164-1) - **Clodinafop-propargyl**
- (f) Aerobic Soil Metabolism (Guideline 162-1) - **Clodinafop-propargyl and the metabolites CGA-193469 and CGA-302371**
- (g) Avian Reproduction (Guideline 71-4) - **Clodinafop-propargyl**
- (h) Seedling Emergence/Vegetative Vigor (Guideline 123-1(a) and 123-1(b)) - **the metabolite CGA-193469**

4. Submit adequate analytical methods for enforcement of the tolerances on wheat. EPA acknowledges that you have submitted enforcement methods which use both normal and reverse phase liquid chromatography with UV detection (HPLC-UV). These methods are currently being validated by the Analytical Chemistry Branch laboratories, BEAD (7503C), Office of Pesticide Programs. We will notify you of the lab's conclusions as soon as they are available.

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5. Comply with the terms of the agreement regarding the maximum amount of clodinafop-propargyl to be sold under this conditional registration as outlined in the correspondence, dated May 26, 2000, from Ms. Karen S. Stumpf of Novartis to Mr. Donald Stubbs, chief of the Herbicide Branch. As agreed in the May 26th letter, Novartis may sell a maximum of 168,900 pounds of clodinafop-propargyl active ingredient during 2000.

6. Submit one copy of the final printed label for the record before you release the product for shipment.

If these conditions are not complied with, the registration 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.

Joanne E. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7E05C)

Enclosures

RD:STANTON:PM Team 23:Rm. 239:CM-2:305-5218:Clodinafop Disk:100-ONT.REG

CONCURRENCES							
SYMBOL ▶	7505C						
SURNAME ▶	S. Stanton						
DATE ▶	May 26, 2000						

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1.25 Gallon Jug  
Booklet

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

JUN 6 2000

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
100-907

Discover™

HERBICIDE

A single pass liquid postemergence herbicide for control of grass weeds in spring wheat (including Durum)

Active Ingredient:	
Clodinafop-propargyl (CAS No. 105512-06-9).....	22.3%
Other Ingredients: .....	77.7%
Total:	100.0%

This product contains petroleum distillates, xylene, or xylene-range aromatic solvent.

Discover Herbicide contains 2 lbs. of clodinafop-propargyl active ingredient per gallon.

EPA Reg. No. 100-907

EPA Est. 71478-CAN-001

Product of Canada

**KEEP OUT OF REACH OF CHILDREN.**

**WARNING/AVISO**

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

See additional precautionary statements, first aid, and directions for use inside booklet.

1.25 GALLONS  
U.S. Standard Measure

NCP 907A-L1 0500

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## DIRECTIONS FOR USE AND CONDITIONS OF SALE AND WARRANTY

**IMPORTANT:** Read the entire **Directions for Use** and the **Conditions of Sale and Warranty** before using this product. If terms are not acceptable, return the unopened product container at once.

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### CONDITIONS OF SALE AND WARRANTY

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The **Directions for Use** of this product reflect the opinion of experts based on field use and tests. 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, or the manner of use or application all of which are beyond the control of Novartis Crop Protection, Inc. or the Seller. All such risks shall be assumed by the Buyer.

Novartis warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions for Use** subject to the inherent risks referred to above. **Novartis makes no other express or implied warranty of Fitness or Merchantability or any other express or implied warranty. In no case shall Novartis or the Seller be liable for consequential, special, or indirect damages resulting from the use or handling of this product.** Novartis and the Seller offer this product, and the Buyer and user accept it, subject to the foregoing **Conditions of Sale and Warranty**, which may be varied only by agreement in writing signed by a duly authorized representative of Novartis.

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**DIRECTIONS FOR USE**

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

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

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry 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 over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as barrier laminate or viton
- Chemical-resistant footwear plus socks

**FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY AND/OR POOR WEED CONTROL.**

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**GENERAL INFORMATION**

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Discover controls several grass weed species in all kinds of spring wheat (including Durum).

Applied postemergence, Discover is rapidly absorbed by weed foliage and translocated to the growing points where it inhibits the acetyl CoA carboxylase (ACCase) enzyme. Susceptible weed species generally stop growing within 48 hours, turn yellow within one to three weeks, and are completely controlled within three to five weeks. Level and rate of control depend on weed species, growing conditions, crop competition, and coverage. Thorough coverage of the plants is essential for consistent control.

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### Rotational Crop Restrictions

The following crops may be planted at the specified interval following application of Discover.

Crop	Rotational Interval
Spring wheat (including Durum)	0 days
Lettuce and other leafy vegetables	3 months
Small grains other than spring wheat (including Durum)	5 months
All other crops	12 months

Although Discover does not control broadleaf weeds, it can be tank mixed with a wide range of broadleaf herbicides to provide broad spectrum one-pass weed control. See the section entitled **Tank Mixes of Discover Herbicide with Broadleaf Weed Herbicides**. Herbicides not approved on this label for tank mixing with Discover may be applied sequentially. Always apply Discover first and allow at least 4 days after application of Discover before applying these herbicides sequentially.

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### APPLICATION PROCEDURES

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**Ground Spray Equipment:** For best accuracy, calibrate the sprayer before use.

**Nozzles** – Must be uniformly spaced along the boom to provide accurate and uniform coverage. Point the nozzles forward in the direction of travel at an angle of 45° for optimum coverage of grass weeds. Follow the nozzle manufacturer's recommendations for pressure and screens.

**Pump** – Must have capacity to maintain pressure (35-40 psi) and to maintain the product suspension through tank agitation. A centrifugal pump is recommended with an agitation rate of 20 gals./minute/100 gals. tank size. Agitation must be maintained during mixing and spraying.

**Screens** – Use a screen or strainer with 16-mesh or coarser on the suction side of the pump. Do not place a screen in the recirculation line unless using a roller or piston pump. Use 50-mesh or coarser screens between the pump and boom, and at the nozzles.

**Water Volume** – Use a minimum application rate of 5-10 gals. of water per acre. Always use a minimum of 10 gals. of water per acre under dry conditions and when treating Persian darnel or annual ryegrass.

**Adjuvants** – Always use the DSV Adjuvant included in the Discover case. Other adjuvants should not be used. See **Mixing Instructions**.

**Pressure** – 35-40 psi at the nozzles. Lower pressure may be used with extended range or low pressure nozzles.

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Good weed coverage with the spray mixture is essential for optimum weed control results. Observe sprayer nozzles frequently during the spraying operation to ensure that the spray pattern is uniform. Avoid large spray overlaps which result in excessive rates in the overlap areas. Also, avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. To reduce spray drift, do not apply under windy conditions. Allow adequate distance between target area and desirable vegetation to prevent drift to nontarget areas. Boom height for broadcast over-the-top application should be based upon the free-standing height of the crop, not height above the soil surface, and should be at least 12 inches above the crop.

Avoid all direct or indirect contact (such as spray drift) of Discover Herbicide with crops other than those recommended for treatment on this label, since injury may occur.

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

**Aerial Application:** Apply Discover Herbicide in water using a minimum spray volume of 3 gals./A. Use a minimum of 5 gals./A under dry conditions and when treating Persian darnel or annual ryegrass. Include DSV Adjuvant in the spray mixture (see **Mixing Instructions**). Use the recommended rates for DSV Adjuvant given in the **Product and Adjuvant Use Rates** table. Do not apply DSV Adjuvant at concentrations greater than 2% v/v in the spray mix as crop injury may result. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 ft. above the crop with low-drift nozzles at a maximum pressure of 40 psi and wind speed not exceeding 10 mph to help assure accurate application within the target area.

**Recommendations to Avoid Spray Drift**

**Aerial Drift Management**

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses, or to applications using dry formulations.

1. The distance of the outermost nozzles on the boom must not exceed  $\frac{3}{4}$  the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they should be observed.

The applicator should be familiar with and take into account the information covered in the **Aerial Drift Reduction Advisory Information**.



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## Aerial Drift Reduction Advisory Information

### Information on 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 provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see **Wind, Temperature and Humidity, and Temperature Inversions**).

### Controlling Droplet Size

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles** – Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

### Boom Length

For some use patterns, reducing the effective boom length to less than  $\frac{3}{4}$  of the wingspan or rotor length may further reduce drift without reducing swath width.

### Application Height

Applications should not be made at a height greater than 10 ft. above the top of the largest plants, unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

### Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

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## Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

## Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

## Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

## Sensitive Areas

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

## Mixing Instructions

1. Clean spray tank and half fill with clean water. Start agitation or bypass system.
2. If a broadleaf herbicide is to be used, add the product **FIRST**, prior to adding Discover Herbicide and agitate for 2-3 minutes.
3. Add correct amount of Discover Herbicide.
4. Agitate for 2-3 minutes.
5. Add the correct amount of DSV Adjuvant as specified in the **Product and Adjuvant Use Rates** table.
6. Agitate for 1-2 minutes before adding remainder of water and then maintain constant agitation.
7. After any break in spraying operations, agitate thoroughly before spraying again.
8. **Use the spray suspension as soon as it is prepared.**
9. If an oily film starts to build up in the tank, drain tank and then clean with a detergent.

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### Sprayer Cleanup

Thoroughly clean application equipment immediately after spraying. Ensure that all traces of the product are removed. The following recommendations are provided:

1. Drain and flush tank walls, boom, and all hoses for 10 minutes with clean water. Do not clean the sprayer near desirable vegetation, wells, or other water sources.
2. Remove the nozzles and screens and wash separately.
3. Dispose of all rinsings in accordance with state and local regulations.
4. If a broadleaf tank mix partner is used, always check tank mix partner label for any additional cleanup procedures.

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### WHEAT (INCLUDING DURUM)

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Discover Herbicide can be used on all types of spring wheat (including Durum) grown in Montana, Minnesota, North Dakota, and South Dakota. Do not allow spray to drift to adjacent fields seeded to crops other than wheat. Do not treat wheat underseeded to forages.

**Notes:** To avoid possible illegal residues: (1) Do not graze livestock or feed forage from treated areas for a minimum of 30 days following application; (2) Do not feed hay for 30 days following application; (3) Do not harvest for 60 days following application; and (4) Make only one application per crop season.

### Weeds Controlled

Discover Herbicide controls wild oats, volunteer oats, green foxtail, yellow foxtail, giant foxtail, barnyardgrass, canarygrass, Persian dandelion, volunteer corn, and annual ryegrass.

### Timing of Application

Apply Discover Herbicide to all types of spring wheat (including Durum) from the 2-leaf stage to emergence of the 4th tiller. When tank mixing with a broadleaf herbicide, always refer to the label of the tank mix partner prior to use.

For optimum results, apply Discover Herbicide to actively growing weeds. An early application will maximize crop yields by reducing weed competition. Weeds emerging after application will not be controlled.

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TIMING OF APPLICATION TO WEEDS		
Weed	Leaves on Main Stem	Tillers
Wild Oats Volunteer Oats Canarygrass	1 to 6-leaf stage on main stem	Prior to emergence of the 4 <sup>th</sup> tiller
Green Foxtail Yellow Foxtail Giant Foxtail	1 to 5-leaf stage on main stem	For optimum control, apply prior to emergence of the 3 <sup>rd</sup> tiller and while weeds are actively growing.
Persian Darnel Annual Ryegrass Barnyardgrass Volunteer Corn	1 to 5-leaf stage on main stem	For optimum control, apply before tillering and while weeds are actively growing.

Weed control can be reduced or delayed under conditions of stress, such as drought, heat, insufficient fertility, flooding, and prolonged cool temperatures. Grass escapes or re-tillering may occur if application is made during prolonged conditions of stress. Optimum weed control will be obtained if application of Discover Herbicide is delayed until the conditions of stress have ended and weeds are once again actively growing.

**Note:** Discover Herbicide alone can be used 30 minutes before rainfall.

*Precaution: Do not apply to a crop that is stressed by conditions such as frost, low fertility, drought, flooding, disease damage, or insect damage, as crop injury may result. Wheat is more susceptible to injury when exposed to temperatures below 40°F during the period 48 hours before or after Discover Herbicide application.*

**Use Rates**

Apply the recommended rate of Discover Herbicide and DSV Adjuvant, using ground equipment, in a minimum of 5 gals. of water per acre, or apply aurally in a minimum of 3 gals. of water per acre (see **Application Procedures** section for exceptions).

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PRODUCT AND ADJUVANT USE RATES	
<b>To Control:</b> Wild Oats Volunteer (Tame) Oats Barnyardgrass Canarygrass Volunteer Corn	<b>To Control:</b> Green Foxtail Yellow Foxtail Giant Foxtail Persian Darnel Annual Ryegrass (Italian)
<b>Apply:</b> 3.2 oz./A of Discover + 10.2 oz./A of DSV Adjuvant	<b>Apply:</b> 4 oz./A of Discover + 12.8 oz./A of DSV Adjuvant
<b>Note:</b> The contents of one Discover case treats <b>50 Acres.</b>	<b>Note:</b> The contents of one Discover case treats <b>40 Acres.</b>

**Note:** Always use DSV Adjuvant with Discover Herbicide. When applied at the recommended rates, all the DSV Adjuvant will be used with the Discover Herbicide in each case of product.

**Tank Mixes of Discover Herbicide with Broadleaf Weed Herbicides**

For broad spectrum control of grass and broadleaf weeds, Discover Herbicide can be tank mixed with the broadleaf herbicides listed in the following table. Consult the label of the tank mix partner for a list of broadleaf weeds controlled, rates, timing, recropping restrictions, grazing interval restrictions, recommendations for specific weeds, directions for use, and precautions.

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<b>TANK MIXES WITH BROADLEAF WEED HERBICIDES<sup>1</sup></b>	
<p><b>Note: To avoid chemical antagonism, do not use multiple tank mix partners.</b>                      When tank mixing, always add the broadleaf herbicide(s) to the spray tank first. Follow with Discover Herbicide and add the DSV Adjuvant last.</p>	
Tank Mix Partners	Product Rates
<b>For Wild Oats, Volunteer Oats, Canarygrass, and Green Foxtail</b>	
Ally <sup>®2</sup>	0.1 oz./A
Amber <sup>®2</sup>	0.28-0.47 oz./A
Banvel <sup>®</sup>	2-3 oz./A
Banvel SGF <sup>®</sup>	4-6 oz./A
Bronate <sup>®</sup>	¾-1½ pts./A
Buctril <sup>®</sup>	¾-1½ pts./A
Buctril + MCPA ester (assume 4 lbs./gal.)	¾-1½ pts./A + ½-¾ pt./A
Buctril Gel	1 pack/5 A
Buctril Gel + MCPA ester (assume 4 lbs./gal.)	1 pack/5 A + ½ to ¾ pt./A
Canvas <sup>™2</sup>	5-10 acres/pack
Clarity <sup>®</sup>	2-3 oz./A
Curtail <sup>™</sup>	2-2 2/3 pts./A
Curtail <sup>™</sup> M	1¾ pts./A
2,4-D Amine (assume 4 lbs./gal.)	8-12 oz./A
Express <sup>®2</sup>	1/6-1/3 oz./A
Finesse <sup>®2</sup>	2/10-4/10 oz./A
Glean <sup>®2</sup>	1/6-1/3 oz./A
Harmony <sup>®</sup> Extra <sup>2</sup>	0.3-0.6 oz./A
Harmony GT <sup>2</sup>	0.3-0.6 oz./A
Harmony GT <sup>2</sup> + MCPA ester (assume 4 lbs./gal.)	0.3-0.6 oz./A + ½-¾ pt./A
MCPA Amine (assume 4 lbs./gal.)	8-12 oz./A
MCPA Ester (assume 4 lbs./gal.)	8-12 oz./A
Peak <sup>®2</sup>	¼-½ oz./A
Peak <sup>2</sup> + MCPA ester (assume 4 lbs./gal.)	¼-½ oz./A + ½-¾ pt./A
Starane <sup>™</sup>	2/3 pt./A
Starane + Sword <sup>®</sup>	1½ pts./A →
Stinger <sup>™</sup>	¼-1/3 pt./A
<b>For Yellow Foxtail, Giant Foxtail, Persian Darnel, Annual Ryegrass, Barnyardgrass, and Volunteer Corn</b>	
Bronate	¾-1½ pts./A
Buctril	¾-1½ pts./A
Buctril Gel	1 pack/5 A
Harmony GT <sup>2</sup>	0.3-0.6 oz./A
Peak <sup>2</sup>	¼-½ oz./A

<sup>1</sup> Always consult the label of the broadleaf herbicide partner before use and follow all crop growth stage restrictions and other directions.

<sup>2</sup> Addition of surfactants other than DSV Adjuvant is not required.

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*Precaution: Temporary crop injury may occur with tank mixes under extreme weather conditions or when the crop is suffering from stress due to inadequate or abnormally high moisture levels or extreme temperatures.*

**Note:** Tank mixing is not recommended with any chemical additives, pesticides, or fertilizers that are not recommended on this label. Herbicides not approved on this label for tank mixing with Discover may be applied sequentially. Always apply Discover first and allow at least 4 days after application of Discover before applying these herbicides sequentially.

### **Management of Resistant Weeds**

Some naturally occurring populations of wild oats, green foxtail, and Persian dandelion have been identified as resistant to herbicides with the ACCase mode of action (herbicides with the same mode of action as Discover such as: Achieve®, Cheyenne®, Dakota®, Hoelon®, Puma™, Tiller®). Selection of resistant biotypes, through repeated use of these herbicides in the same field, may result in control failures. Rotate the use of Discover Herbicide with herbicides that have a different mode of action, or use cultural control practices, in order to delay selection for resistant populations of weeds.

A resistant biotype may be present if poor performance cannot be attributed to adverse weather conditions or improper application methods. If resistance is suspected, contact your local Novartis representative for assistance.

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### **STORAGE AND DISPOSAL**

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Do not contaminate water, food, or feed by storage or disposal. Do not use in animal feeds.

#### **Storage**

Store in a cool, dry place.

#### **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**

Do not reuse empty container. Triple rinse (or equivalent), puncture, and dispose of empty container in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. In the event of a major spill, fire, or other emergency, call 1-800-888-8372, day or night.

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## PRECAUTIONARY STATEMENTS

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### Hazards to Humans and Domestic Animals

#### WARNING/AVISO

Causes skin and eye irritation. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes, on skin, or on clothing.

#### First Aid

**If on skin:** Wash with plenty of soap and water. Get medical attention.

**If in eyes:** Flush eyes with plenty of water. Call a physician if irritation persists.

**If swallowed:** Call a physician or Poison Control Center. Do not induce vomiting. Drink milk, egg whites, gelatin solution or, if these are not available, a large quantity of water. Avoid alcohol.

**Note to Physician:** If ingested, solvent may present an aspiration hazard. Treat symptomatically.

#### Personal Protective Equipment

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

#### Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as barrier laminate or viton
- Chemical-resistant footwear plus socks
- Chemical-resistant apron when cleaning equipment, mixing, or loading

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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### Engineering Control Statements

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.
- 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, 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 wash water or rinsate.

### Physical or Chemical Hazards

Do not use or store near heat or open flame.

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Greensboro, North Carolina 27419  
[www.cp.us.novartis.com](http://www.cp.us.novartis.com)

NCP 907A-L1 0500

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