

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

April 2, 2021

Jeffrey H. Birk, Ph.D. Regulatory Manager BASF 26 Davis Drive Research Triangle Park, NC 27709

Subject: Registration Review Label Mitigation for Diflufenzopyr

Product Name: DISTINCT HERBICIDE EPA Registration Number: 7969-150 Application Dates: May 6, 2019 Decision Numbers: 567976

Dear Dr. Birk:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Diflufenzopyr Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

Page 2 of 2 EPA Reg. No. 7969-150 Decision No. 567976

If you have any questions about this letter, please contact Marisa Wright by phone at (703) 347-0463, or via email at <a href="wright.marisa@epa.gov">wright.marisa@epa.gov</a>.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure



Dicamba	Group	4	Herbicide
Diflufenzopyr	Group	19	Herbicide

# Distinct

# herbicide

# ACCEPTED

Apr 02, 2021

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 7000 150

° 7969-150

For weed control in field corn, popcorn, sweet corn, between-crop application, Conservation Reserve Program land, noncropland sites, pasture, hay, and rangeland

#### **Active Ingredients:**

sodium salt of diflufenzopyr: 2-(1-[([3,5-difluorophenylamino]carbonyl)-	
hydrazono]ethyl)-3-pyridinecarboxylic acid, sodium salt*	21.3%
sodium salt of dicamba: 3,6-dichloro-o-anisic acid**	55.0%
Other Ingredients:	23.7%
Total:	00.0%

<sup>\*</sup>This product contains 20% 2-(1-[([3,5-difluorophenylamino]carbonyl)-hydrazono]ethyl)-3-pyridinecarboxylic acid (diflufenzopyr) or 0.20 pound acid equivalent per pound of product.

EPA Reg. No. 7969-150

**EPA Est. No.** 

# KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCION

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 inside for complete First Aid, Precautionary Statements, Directions For Use, Conditions of Sale and Warranty, and state-specific crop and/or use site restrictions.

In case of an emergency endangering life or property involving this product, call day or night 1-800-832-HELP (4357).

# **Net Contents:**

BASF Corporation 26 Davis Drive, Research Triangle Park, NC 27709

<sup>\*\*</sup> This product contains 50% 3,6-dichloro-o-anisic acid or 0.50 pound acid equivalent per pound of product.

FIRST AID		
If in eyes	<ul> <li>Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after first 5 minutes; then continue rinsing eyes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>	
<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>DO NOT induce vomiting unless told to by a poison control center or doctor.</li> <li>DO NOT give anything by mouth to an unconscious person.</li> </ul>		
HOTI INE NUMBER		

#### HOTLINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may also contact BASF Corporation for emergency medical treatment information: 1-800-832-HELP (4357).

# **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

**CAUTION.** Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### Personal Protective Equipment (PPE)

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

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves (except for pilots), such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber (includes natural rubber blends and laminates)  $\geq$  14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or viton ≥ 14 mils

See **Engineering Controls** for additional requirements and exceptions.

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

# **USER SAFETY RECOMMENDATIONS**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothina.

# **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. Pilots must use cockpits in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)].

#### **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 rinsates. This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### Ground and Surface Water Protection

Point-source Contamination. To prevent point-source contamination, **DO NOT** mix/load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sinkholes, perennial or intermittent streams and rivers, and natural or impounded lakes and reservoirs. **DO NOT** apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing, or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or move across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or

container leaks, equipment washwater, and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixture or rinsate. Check valves or antisiphoning devices must be used on all mixing equipment.

#### Movement by Surface Runoff or Through Soil.

**DO NOT** apply under conditions which favor runoff. **DO NOT** apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for groundwater contamination. Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. **DO NOT** apply to soils classified as sand with less than 3% organic matter and where groundwater depth is shallow. To minimize the possibility of groundwater contamination, carefully follow application rate as specified.

#### Movement by Water Erosion of Treated Soil.

**DO NOT** apply or incorporate this product through any type of irrigation equipment or by flood or furrow irrigation. Ensure treated areas have received at least 1/2-inch rainfall or irrigation before using tailwater for subsequent irrigation of other fields.

**Non-target Organism Advisory Statement:** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

#### **Endangered Species**

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law.

To ensure the protection of known populations of threatened and endangered plants when applying **Distinct**® **herbicide** to pasture, rangeland, and noncropland sites:

- 1. Federal agencies must follow NEPA regulations to ensure protection of threatened and endangered plants.
- State agencies must work with the Fish and Wildlife Service or the Service's designated state conservation agency to ensure protection of threatened and endangered plants.
- Other organizations or individuals must operate under a Habitat Conservation Plan if threatened or endangered plants are known to be present on the land to be treated.

Apply **Distinct** only when the potential for drift to known populations of threatened or endangered plant species is minimal (e.g. when wind is blowing away from the sensitive area).

# **Directions For Use**

It is a violation of federal law to use this product in a manner inconsistent with its labeling. All applicable directions, restrictions, precautions, and **Conditions of Sale and Warranty** are to be followed. This labeling must be in the user's possession during 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.

For ground application only, except where otherwise directed.

#### 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 **24 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 worn over short-sleeved shirt and short pants
- Chemical-resistant footwear plus socks
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

#### NONAGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) 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.

Noncropland, pasture, and rangeland weed control is not within the scope of the Worker Protection Standard. See **Product Information** for a description of noncropland sites.

**DO NOT** enter or allow others to enter treated areas until sprays have dried.

#### STORAGE AND DISPOSAL

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

# **Pesticide Storage**

Store product in original container only. Store product in a cool, dry place. **DO NOT** store this product under wet conditions. Avoid cross-contamination with other pesticides.

# **Pesticide Disposal**

Wastes resulting from use of this product must be disposed of on-site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **Container Handling**

**Nonrefillable Container. DO NOT** reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying; then offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Triple rinse containers small enough to shake (capacity ≤ 50 pounds) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Triple rinse containers too large to shake (capacity > 50 pounds) as follows: Empty the remaining contents into application equipment or a mix tank. Fill the con tainer 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or mix tank. Hold container upside down over application equipment or mix tank, or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

# In Case of Spill

In case of large-scale spill of this product, call:

• CHEMTREC 1-800-424-9300

• BASF Corporation 1-800-832-HELP (4357)

In case of medical emergency regarding this product, call:

• Your local doctor for immediate treatment

• Your local poison control center (hospital)

• BASF Corporation 1-800-832-HELP (4357)

#### Steps to take if material is released or spilled:

- Dike and contain the spill with inert material (sand, earth, etc.) and transfer liquid and solid diking material to separate containers for disposal.
- Remove contaminated clothing and wash affected skin areas with soap and water.
- Wash clothing before reuse.
- Keep the spill out of all sewers and open bodies of water.

#### **Product Information**

**Distinct®** herbicide is a selective postemergence herbicide for the control of annual and biennial broadleaf weeds and control or suppression of many perennial broadleaf weeds in field corn, popcorn, sweet corn, between-crop application, Conservation Reserve Program land, noncropland sites, pasture, hay, and rangeland sites. Examples of noncropland sites include, but are not limited to: railroad, utility, pipeline and highway rights-of-way; railroad crossings, utility plant sites, petroleum tank farms, pumping installations, nonagricultural fencerows, and airports.

**Distinct** provides suppression of annual grass weeds at appropriate rates. Emerged grass up to 3-inches tall will stop growing but may remain green for weeks after application. Regrowth of grass is limited when crop canopies over row middles.

**Distinct** may be applied sequentially or tank mixed with a grass herbicide for a complete weed control program; refer to **Tank Mixing Information**.

Use of this product in certain portions of Oregon and Washington is subject to the January 22, 2004, Order for Injunctive Relief in <u>Washington Toxics Coalition</u>, et. al. v. EP, C01-0132C, (W.D. WA). For further information, please refer to http://www.epa.gov/espp/litstatus/wtc/index.html.

#### Mode of Action

**Distinct** is absorbed by leaves, roots, and shoots and is translocated to the growing points of sensitive weeds to provide postemergence control of emerged weeds as well as moderate residual control of germinating weeds. **Distinct** controls weeds by auxin transport inhibition and auxin agonist modes of action. In addition, **Distinct** can complement the activity of other auxin-like herbicides such as clopyralid, picloram, and triclopyr.

Weeds treated with **Distinct® herbicide** will typically display symptoms within several hours and be controlled in 3 to 7 days. Control of larger annual, biennial, or perennial weeds may require additional time. Treated weeds will stop growing soon after application. Broadleaf weeds will display epinastic twisting and crinkling symptoms before becoming necrotic.

# **Weed Resistance Management**

While weed resistance to herbicides is infrequent, populations of resistant biotypes are known to exist. Resistance management should be part of a diversified weed control strategy that integrates multiple options including chemical, cultural, and mechanical (tillage) control tactics. Cultural control tactics include crop rotation, proper fertilizer placement, optimum seeding rate/row spacing, and timely tillage.

To aid in the prevention of developing weeds resistant to this product, follow these steps where practical:

- Start clean with tillage or an effective burndown herbicide program.
- **DO NOT** rely on a single herbicide site of action for weed control during the growing season.
- Scout fields before application to ensure herbicides and rates will be appropriate for the weed species and weed sizes present.
- Apply full labeled rates of **Distinct** for the most difficult-to-control weed in the field at the specified time (correct weed size) to minimize weed escapes.
- Use of preemergence herbicides that provide soil residual control of broadleaf and grass weeds is recommended to reduce early season weed competition and allow for more timely in-crop postemergence herbicide applications.
- Avoid application of herbicides with the same site of action more than twice a season.
- Scout fields after application to detect weed escapes or shifts in weed species.
- Report any incidence of non-performance of this product against a particular weed species to your BASF retailer, representative.
- If resistance is suspected, treat weed escapes with a herbicide having a different mode of action and/or use non-chemical methods to remove escapes, as is practical, with the goal of preventing further seed production.
- For more information about weeds that are known to be resistant to dicamba go to

#### www.Resistance-Information.BASF.US.

Additionally, follow as many of these herbicide resistance management practices as is practical:

- Use a broad spectrum soil-applied herbicide with other modes of action as a foundation in a weed control program.
- Utilize sequential applications of effective herbicides with alternative modes of action.
- Rotate the use of this product with herbicides having a different mode of action.

- Avoid making more than two applications of **Distinct**and any other **Group 4** or **Group 19** herbicides within a
  single growing season unless mixed with another site of
  action with an overlapping spectrum for the difficult-tocontrol weeds.
- Contact your local sales representative, crop advisor, or extension agent for find out if suspected resistant weeds to these sites of action have been found in your region.
   DO NOT assume that each listed weed is being controlled by multiple mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weed control. Some weeds may be controlled by only one of the active ingredients in this product.
- Incorporate non-chemical weed control practices, such as mechanical cultivation, crop rotation, cover crops and weed-free crop seeds, as part of an integrated weed control program.
- Thoroughly clean plant residues from equipment before and after leaving fields suspected to contain resistant weeds
- Manage weeds in and around fields during and after harvest to reduce weed seed production.
- Contact the local agricultural extension service, BASF representative, ag retailer or crop consultant for further guidance on weed control practices as needed.

# **Crop Tolerance**

Labeled crops are generally very tolerant to **Distinct** application. Temporary injury may occur under conditions of crop stress or rapid growth. Crop stress can be caused by drought, poor fertility, other pesticides (i.e. other herbicides), or foliar damage because of hail, wind, or insects. Injury can be avoided by agronomic practices that promote good crop growth and minimize stress conditions, especially combinations of stress factors. Crop leaning may occur during periods of rapid growth but is usually temporary and dissipates within 7 days without subsequent yield reduction.

Crops growing under stress conditions such as drought, poor fertility, or foliar damage because of hail, wind, or insects can exhibit various injury symptoms that may be more pronounced if herbicides are applied.

# Coverage

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

#### Cultivation

Avoid disturbing (e.g. tillage or cultivating) treated areas for at least 7 days following application to allow best herbicide uptake, translocation, and weed control.

# **Cleaning Spray Equipment**

Clean application equipment thoroughly using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions. Triple rinse the equipment before and after applying this product.

# **Application Instructions**

Best product performance is obtained when **Distinct**herbicide is applied to actively growing weeds. **Distinct**may be applied as a ground broadcast or spot spray application or as an aerial application (only as directed) at a rate of 4 to 8 ounces per acre plus spray additive (see **Spray Additives**). **DO NOT** make aerial application to corn. To avoid uneven spray coverage, **DO NOT** apply **Distinct** during periods of gusty winds or when wind speed exceeds 10 mph.

Weeds treated with **Distinct** will typically display symptoms within several hours and be controlled in 3 to 7 days. Treated weeds will stop growing soon after application. Broadleaf weeds will display epinastic twisting and crinkling symptoms before becoming necrotic. Suppressed grass weeds may display some epinasty and remain stunted and green.

# **Aerial Application Methods and Equipment**

Use 2 or more gallons of water per acre. Select nozzles designed to produce a minimal amount of fine spray particles.

The actual minimum spray volume per acre is determined by the spray equipment used. Use adequate spray volume to provide accurate and uniform distribution of spray particles over the treated area and to avoid spray drift. Make aerial application at the lowest safe height to reduce exposing the spray to evaporation and wind.

# Ground Application Methods and Equipment

**Distinct**, a wettable granule formulation, can be applied using water as the spray carrier.

**Water Volume.** Select an appropriate spray volume that ensures adequate coverage of the target weed species. Use higher water volumes when treating dense or tall vegetation. **DO NOT** apply less than 3 gallons of spray volume per acre.

**Application Equipment.** Use ground application equipment that will provide good spray coverage of weed foliage. Exercise preventive measures to avoid drift onto nontarget areas.

#### **SPRAY DRIFT**

# **Aerial Applications:**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field.
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site. If the wind speed is greater than 10 miles per hour, the boom length must be 65% or less of the wingspan for fixed wing aircraft and 75% or less of the rotor diameter for helicopters. Otherwise, the boom length must be 75% or less of the wingspan for fixed-wing aircraft and 90% or less of the rotor diameter for helicopters.
- **DO NOT** release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators must use 1/2 swath displacement upwind at the downwind edge of the field. **DO NOT** apply during temperature inversions.

#### **Ground Boom Applications:**

- User must only apply with the release height recommended by the manufacturer, but no more than 4 feet above the products applied in ground or crop canopy.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

#### **Boom-less Ground Applications:**

- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 15 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

# Spray Drift Advisories

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

# Importance of Droplet Size

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

# **Controlling Droplet Size - Ground Boom**

 Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.

- Pressure Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

# **Controlling Droplet Size – Aircraft**

 Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

#### **Boom Height – Ground Boom**

For ground equipment, the boom should remain level with the crop and have minimal bounce.

# **Boom-less Ground Applications**

Setting the release height at the lowest effective height will help to reduce the potential for spray drift.

#### Release Height - Aircraft

Higher release heights increase the potential for spray drift.

#### **Shielded Sprayers**

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

# **Temperature and Humidity**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **Temperature Inversions**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or 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. Avoid applications during temperature inversions.

#### Wind

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.** 

#### **Spray Additives**

Adjuvants must be used with **Distinct®** herbicide for consistent weed control.

# Nonionic Surfactant (all uses)

Use 1 quart (0.25% volume/volume [v/v]) of an 80% active nonionic spray surfactant per 100 gallons of water.

# Nitrogen Source (field corn, popcorn, sweet corn, between-crop application)

For best results under most conditions, combine a nonionic surfactant (NIS) with urea ammonium nitrate (UAN). Use a minimum of 5 quarts UAN (28% to 34% nitrogen) per 100 gallons. Spray grade ammonium sulfate (AMS) (21% nitrogen) may be substituted for UAN at a minimum of 5 lbs/100 gallons spray mix. Use high-quality AMS (spray grade) to avoid plugging nozzles. When using AMS, dissolve **Distinct** in the tank before adding AMS. Because most nitrogen solutions are mildly corrosive to galvanized steel, mild steel, and brass spray equipment, rinse the entire spray system with water soon after use.

# Methylated Seed Oil (CRP, noncropland, pasture, and rangeland)

Methylated vegetable-based seed oil concentrate may be used at the rate of 1.5 to 2 pints/A. When using spray volumes greater than 30 gallons/A, mix methylated seed oil (MSO) or vegetable-based seed oil concentrates at 1% of the total spray volume. Methylated seed oils may aid in deposition and uptake of **Distinct** for hard-to-control perennials, waxy leaf species, or when plants are under moisture or temperature stress.

# **Compatibility Test for Mix Components**

Add components in the following sequence using 2 teaspoons for each pound of dry product or 1 teaspoon for each pint of liquid product of specified label rate per acre. **EXAMPLE:** 1 teaspoon per 8 ozs/A **Distinct** rate.

- Water For 20 gallons/A spray volume, use 3.3 cups (800 mL) of water. For other spray volumes, adjust rates accordingly. Use only water from the intended source at the source temperature.
- 2. **Products in PVA bags** Cap the jar and invert 10 cycles.
- 3. **Water-dispersible products** (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions) Cap the jar and invert 10 cycles.
- 4. **Water-soluble products** such as **Distinct** Cap the jar and invert 10 cycles.
- 5. **Emulsifiable concentrates** Cap the jar and invert 10 cycles.
- 6. **Water-soluble additives** (i.e. AMS, NIS, or UAN when applicable) Cap the jar and invert 10 cycles.
- 7. Let the solution stand for 15 minutes.
- 8. **Evaluate** solution for uniformity and stability. The spray solution should not have free oil on the surface, or fine particles that precipitate to the bottom, or thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, **DO NOT** mix the ingredients in the same tank.

# **Mixing Order**

- Water Begin by agitating a thoroughly clean sprayer tank 1/2 full of clean water.\*
- Products in PVA bags Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- Water-dispersible products (dry flowables, wettable powders, suspension concentrates, or suspo-emulsions)
- Water-soluble products such as Distinct® herbicide
- 5. Emulsifiable concentrates
- Water-soluble additives (NIS, AMS, or UAN when applicable)
- 7. Remaining quantity of water

Maintain constant agitation during application. For more information, refer to **Tank Mixing Information**.

\* User may fill the spray tank from a nurse tank containing an AMS product dissolved in water. For this method, thoroughly dissolve the AMS product before adding **Distinct**. **Distinct** must be thoroughly dissolved before adding additional products or additives. Verify that the AMS premix water alternative is compatible with other tank mix components.

# **Tank Mixing Information**

Use **Distinct** sequentially or tank mix with other herbicides as part of a complete weed control program. Tank mix recommendations are for use only in states where the sequential or tank mix product and application site are registered. Refer to **Table 1** and **Crop-specific Information** for more details and for specific tank mix restrictions. Local agricultural authorities may be a source of information when using other than BASF-recommended tank mixes. Read and follow the applicable restrictions and limitations and **Directions For Use** on all products involved in tank mixing. The most restrictive labeling applies to tank mixes.

Physical incompatibility, reduced weed control, or crop injury may result from mixing **Distinct** with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers.

Table 1. Tank Mix Options for Noncropland, Pasture, and Rangeland

Tank Mix Partner	Distinct® herbicide Tank Mix Rate (ozs/A)
Noncropland, Pasture, and Rang	geland
clopyralid (Redeem®1, Stinger®, Transline®)	4
picloram ( <b>Grazon<sup>®</sup> P+D</b> , <b>Tordon</b> <sup>®</sup> )	4
triclopyr ( <b>Garlon</b> ® <b>3A</b> , <b>Garlon</b> ® <b>4</b> , <b>Remedy</b> ®)	4
Facet® L herbicide	4 to 6
Plateau <sup>®</sup> herbicide	4 to 8
2,4-D	4 to 8
chlorsulfuron ( <b>Telar</b> ®)	4 to 8
glyphosate	4 to 8
metsulfuron methyl ( <b>Ally</b> <sup>®</sup> , <b>Escort</b> <sup>®</sup> )	4 to 8
Noncropland Only <sup>2</sup>	
Arsenal <sup>®</sup> herbicide Sahara <sup>®</sup> DG herbicide	4 to 8
Pendulum <sup>®</sup> AquaCap <sup>™</sup> herbicide	4 to 8
diuron	4 to 8
fluroxypyr ( <b>Vista</b> ®)	4 to 8
sulfometuron methyl ( <b>Oust</b> ®)	4 to 8

<sup>&</sup>lt;sup>1</sup> **Redeem** is a combination of triclopyr and clopyralid.

#### **Restrictions and Limitations**

- **DO NOT** apply by air unless otherwise directed.
- Maximum Seasonal Use Rate Refer to Table 2.
- Noncropland Use Sites DO NOT enter treated areas without protective clothing until sprays have dried.
- Rainfast Period Distinct is rainfast 4 hours after application when used with recommended adjuvants according to Spray Additives.
- DO NOT apply to crops showing injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide application because this injury may be enhanced or prolonged.
- DO NOT apply if corn is more than 36 inches tall or within 15 days before tassel emergence, whichever comes first.
- For sequential applications, DO NOT apply Distinct less than 15 days apart.

Tank mixtures with these products are for **noncropland sites only**. Read and follow applicable **Directions For Use**, restrictions and limitations, and **registered use sites** for the appropriate tank mix partner.

- Preharvest Interval (PHI)
  - DO NOT apply within 32 days before corn forage harvest.
  - DO NOT apply within 72 days before corn grain and stover harvest.
- Pasture and rangeland grass treated with Distinct®
  herbicide can be grazed immediately after application
  or harvested for livestock feed 7 days after application.
- **DO NOT** apply through any type of irrigation system.
- **DO NOT** treat irrigation ditches or water used for crop irrigation or domestic uses.

- This product cannot be used to formulate or reformulate any other pesticide product.
- Crop Rotation Restrictions DO NOT plant any crops within 120 days after the last application of Distinct, with the following exceptions:
  If at least 1 inch of rainfall or overhead irrigation is received following the last application of Distinct (less than or equal to 4 ozs/A only), alfalfa, cereal grain crops, cotton, grain sorghum, and soybeans may be planted 30 days after the rainfall/irrigation event in all states except California. In the event of crop failure, corn can be replanted 7 or more days after application.

Table 2. Crop or Use Site Restrictions and Limitations

Crop or Use Site	Maximum Rate per Application (ozs/A)	Maximum Rate per Season (ozs/A)	PHI (days)	Livestock Grazing or Cutting for Hay Permitted
Field corn, forage	8	10	32	No
Field corn, grain or stover	8	10	72	No
Sweet corn, forage	4	6	32	No
Sweet corn, grain or stover	4	6	72	No
Noncropland areas	8	10	NA	No
CRP land	8	8	NA	No
Pasture Hay Rangeland	8	8	0 grazing 7 cutting for hay	Yes

NA = not applicable

# **Crop-specific Information**

#### Corn

# Field Corn grown for Grain, Seed, or Silage, and Popcorn

Before applying **Distinct** to popcorn or seed corn, verify the selectivity of **Distinct** on the inbred line or popcorn hybrid with your local seed corn company to help avoid potential injury to sensitive lines.

Refer to **Sweet Corn** section for use on sweet corn.

# **Application Rate and Timing DO NOT** apply by air to corn.

**Distinct** can be applied at the rates and growth stages listed in **Table 3** in all tillage systems (e.g. conventional,

no-till, reduced tillage).

• Preplant Application in Reduced or No-till Corn-Distinct can be applied up to 7 days before planting corn at 4 to 6 ozs/A. When planting into a legume sod (e.g. alfalfa or clover), apply Distinct at 6 to 8 ozs/A after 4 to 6 inches of regrowth. Allow at least 15 days before planting if using more than 6 ozs/A. Adjuvants must be used with Distinct for consistent weed control. DO NOT use crop oil with Distinct after crop emergence or crop injury may result.

When using liquid fertilizer as the carrier, always presurry **Distinct** in water before adding to fertilizer solutions. Add the **Distinct** slurry to the final complete fertilizer mixture. **DO NOT** add **Distinct** during the fertilizer mixing process. Always use good agitation while adding the **Distinct** slurry to liquid fertilizers; maintain good agitation until sprayed. Conduct a compatibility test with all components when using liquid fertilizers as a carrier for **Distinct**. Use of sprayable fluid fertilizer as the carrier is not recommended for application of **Distinct** made after corn emergence.

- **Very Early Postemergence** (spike through 4-inch corn stage) Apply **Distinct** at 4 ozs/A.
- Early Postemergence (4-inch to 10-inch corn stage) Apply Distinct at 6 to 8 ozs/A to provide knockdown
  and residual control through corn canopy closure. Apply
  Distinct early postemergence to minimize weed competition and maximize corn yield potential.
- Mid-postemergence (10-inch to 24-inch corn stage) Apply Distinct at 4 ozs/A.
- Late Postemergence (Rescue) Application with Drop Nozzles - Apply Distinct at 4 ozs/A to corn 24-inches to 36-inches tall when using drop nozzles.
   DO NOT apply when corn is within 15 days of tassel emergence. Avoid direct spray application into the whorl of corn plants or crop injury may occur.

Split Application - Split applications of Distinct®
herbicide may be made during a growing season.
 DO NOT exceed a total of 10 ozs of Distinct per treated acre per crop year. Allow a minimum of 15 days between sequential applications of Distinct.

Table 3. Application Rate and Timing in Field Corn and Popcorn

Application Timing	Corn Stage <sup>1</sup>	Distinct Rate (ozs/A)
Preplant	At least 7 days before planting <sup>2</sup>	4 to 8
Very Early Postemergence	Spike to 4 inches	4
Early Postemergence	4 to 10 inches	6 to 8*
Mid- Postemergence	10 to 24 inches	4
Late Postemergence (Rescue)	24 to 36 inches <sup>3</sup>	4

<sup>1</sup> Measure corn height to the arch of the highest leaf that is more than 50% emerged.

# Field Corn Tank Mixes and Sequential Uses

In addition to control of many broadleaf weed species, **Distinct** offers herbistatic suppression of several annual
grass weeds that may enhance overall control of your
grass herbicide program. For commercial control of grass,
use **Distinct** as a sequential postemergence treatment
following a preemergence grass herbicide

(e.g. **G-Max Lite<sup>TM</sup> herbicide**, **Outlook® herbicide**) or in tank mix combination with a postemergence grass herbicide (e.g. **Accent® herbicide**, **Option® herbicide**).

#### **Corn Tank Mix Restrictions and Limitations**

**Distinct** may be applied sequentially or in tank mixes with other herbicides registered for use in corn (including herbicides registered for use in corn hybrids tolerant to glyphosate, glufosinate, and imidazolinone) with the following limitations:

- When tank mixing **Distinct** for use on popcorn, ensure the tank mix partner is registered for use in popcorn.
- When tank mixing Option, MSO at the rate of 1.5 pints/A may be used in place of NIS.
- DO NOT use Distinct postemergence in tank mixes with plant growth regulating herbicides such as those products that contain dicamba; 2,4-D; or clopyralid (e.g. Banvel® herbicide, Celebrity® Plus herbicide, Clarity® herbicide, Hornet® herbicide, NorthStar® herbicide, Shotgun® herbicide, Weedone® 64 herbicide). Additionally, separate sequential treatments with these products by at least 15 days.

- DO NOT use tank mixes with emulsifiable concentrate (EC) formulations of chloroaceteamide grass herbicides (e.g. Dual II Magnum® herbicide, Harness® herbicide, Outlook, Surpass® herbicide) after corn emergence.
- Distinct may be used sequentially with all soil-applied insecticides or used sequentially or in tank mixes with foliar-applied insecticides with the following limitations:
   DO NOT use Distinct in foliar-applied tank mixes with Ambush® EC insecticide or Lorsban® insecticide. However, sequential treatments with these products may be used if applications are separated by at least 7 days.

#### **Sweet Corn**

Use in sweet corn not permitted in California unless otherwise directed by supplemental labeling.

**DO NOT** apply by air to sweet corn.

Apply 2 to 4 ozs/A of **Distinct** for suppression of broadleaf weeds listed in **Table 4**. Apply when weeds are less than 3-inches tall and when sweet corn is from 4-inches to 24-inches tall. For improved spray coverage of weeds and to minimize risk of crop injury, use drop nozzles that direct the spray away from the whorls and beneath the leaves of sweet corn greater than 10-inches tall. Use only a nonionic surfactant at a rate of 0.25% v/v (1 quart/100 gallons) as the spray additive when applying this product on sweet corn.

#### **Sweet Corn Restrictions and Limitations**

- DO NOT apply by air to sweet corn.
- **DO NOT** apply to sweet corn without first verifying the selectivity of **Distinct** on your specific hybrid with your local seed supplier.
- DO NOT use Distinct on sweet corn grown for seed production.
- If sequential applications are used, applications must be separated by a minimum of 2 weeks and must not exceed a total of 6 ozs/A per season. Sweet corn ears or forage may be harvested at 32 or more days after application.
- DO NOT apply within 72 days of dry grain or stover harvest.

#### **Tank Mixes**

**Distinct** may be tank mixed with atrazine or **Basagran®** herbicide for improved broadleaf weed control in sweet corn. **DO NOT** tank mix with other herbicides or insecticides when using **Distinct** in sweet corn.

<sup>2</sup> Allow at least 15 days before planting if using more than 6 ozs/A.3 **DO NOT** make application if corn is within 15 days of tassel emergence

<sup>\*</sup> Use up to 8 ozs/A of **Distinct** for enhanced perennial weed control or increased annual grass suppression.

# **Between-crop Application**

# **Fall Application**

Following crop harvest and before frost, apply 2 to 8 ozs/A of **Distinct® herbicide** to control emerged broadleaf weeds. For best performance, apply **Distinct** when weeds are in the 2-leaf to 4-leaf stage or when rosettes are less than 2-inches across.

Any crop may be planted the following spring, 120 days after application in the fall. Refer to **Restrictions and Limitations** for details on crop rotation restrictions within 120 days and maximum seasonal use rate.

# **Spring Application**

Apply 2 to 4 ozs/A of **Distinct** to control emerged broadleaf weeds in the spring. For best performance, apply **Distinct** when weeds are in the 2-leaf to 4-leaf stage or when rosettes are less than 2-inches across.

Following a **Distinct** application and a minimum accumulation of 1-inch rainfall or overhead irrigation, a 30-day waiting interval is required before planting alfalfa, cereal grain crops, corn, cotton, grain sorghum, and soybeans. A 120-day waiting interval is required before planting all other crops.

- **DO NOT** make **Distinct** spring between-crop application in geographic areas with average rainfall less than 25 inches, or in California.
- **DO NOT** exceed 4 ozs/A in a spring between-crop application.
- DO NOT exceed maximum rate per season when applying both fall and spring applications to site. See Table 2 for maximum rate per season by crop or use site.
- DO NOT apply additional dicamba-containing products (e.g. Banvel® herbicide, Clarity® herbicide) in tank mixture or sequentially in the same spring season.

# **Site-specific Information**

# Rights-of-Way, Industrial Areas, and other Noncropland Sites

**Distinct** may be applied by ground and aerial application methods at 2 to 8 ozs/A for broadleaf weed control in roadside, utility, pipeline, and railroad rights-of-way, and other noncropland sites; see **Table 4** for weed list. **Distinct** may be applied alone or with suitable tank mixes to broaden or enhance weed control. See **Table 1** for additional information on tank mixes. **Distinct** may be used for postemergence broadleaf weed control in noncropland sites where total vegetation control is desired.

**DO NOT** apply more than 10 ozs/A of **Distinct** per season in rights-of-way, industrial areas, and other noncropland sites.

# **Pasture and Rangeland**

Pasture and rangeland grass treated with **Distinct** can be grazed immediately after application or harvested for livestock feed **7 days** after application.

**Distinct** may be applied by ground and aerial application methods [Alternate Text: by ground and aerial application methods with aerial only permitted in the states of Colorado, Kansas, Montana, Nebraska, South Dakota, Utah, and Wyoming] at 2 to 8 ozs/A in pasture and rangeland sites for postemergence broadleaf weed control; see **Table 4** for weed list. **Distinct** may be used alone or in combination with other pasture/rangeland labeled herbicides to enhance control of perennial weeds or complement the spectrum of weeds controlled. See **Table 1** for additional information on tank mixes.

**DO NOT** apply more than 8 ozs/A of **Distinct** per season in pasture and rangeland.

**DO NOT** apply **Distinct** to small grains grown for pasture or to newly seeded grass. Established grass growing under environmental stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. **Distinct** may injure bentgrass, buffalograss, carpetgrass, St. Augustinegrass, and velvetgrass. **Distinct** will severely injure alfalfa, clover, lespedeza, vetch, wild winter peas, and other legumes.

# For Use in Intensively Managed Forage Grass, such as Forage Grass Grown for Hay, in the states of Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming

Apply 2 to 4 ozs/A **Distinct** in forage grass for postemergence broadleaf weed control. **Distinct** may be applied by ground and aerial application methods. **Aerial application is only permitted in the states of Montana, Utah, and Wyoming.** 

**Distinct** may be used alone or in combination with other pasture/rangeland-labeled herbicides to improve control of perennial weeds or complement the spectrum of weeds controlled. When tank mixed with 2,4-D, **DO NOT** use more than 1.5 pints/A of 2,4-D.

For improved consistency of weed control, only use non-ionic surfactant at a rate of 1 quart of an 80% active NIS spray surfactant per 100 gallons of water (0.25% v/v).

**DO NOT** apply **Distinct** to forage grass during, 3 days before, or 3 days after a frost/freeze event because potential crop injury may occur.

# **Conservation Reserve Programs**

**Distinct®** herbicide may be applied by ground and aerial application methods [Alternate Text: by ground and aerial application methods with aerial only permitted in the states of Colorado, Kansas, Montana, Nebraska, South Dakota, Utah, and Wyoming] at 2 to 8 ozs/A in established grass stands in Conservation Reserve Programs (CRP) or federal Set-aside Programs for postemergence broadleaf weed control. **Distinct** may be used alone or in combination with other CRP-labeled herbicides to enhance control of perennial weeds or complement the spectrum of weeds controlled.

**DO NOT** apply more than 8 ozs/A of **Distinct** per season in CRP land.

**DO NOT** apply **Distinct** to newly seeded grass. Established grass growing under environmental stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. **Distinct** may injure bentgrass, buffalograss, carpetgrass, St. Augustinegrass, and velvetgrass. **Distinct** will severely injure alfalfa, clover, lespedeza, vetch, wild winter peas, and other legumes.

#### **Weeds Controlled**

**Distinct** will provide postemergence control of annual and biennial broadleaf weeds and control or suppression of many perennial broadleaf weeds including ALS-resistant<sup>1</sup> and triazine-resistant biotypes.

**Distinct** provides suppression of annual grass weeds at appropriate rates. Emerged grass up to 3-inches tall will stop growing but may remain green for weeks after application. Regrowth of grass is limited when crop canopies over row middles.

ALS (acetolactate synthase)-resistant weeds include those weeds resistant to the sulfonylurea, imidazolinone, and/or sulfonamide family of herbicides.

Table 4. Weed Control List

Common Name	Scientific Name
Annual Weeds	
Amaranth, Palmer	Amaranthus palmeri
Amaranth, Powell*	Amaranthus powellii
Amaranth, spiny	Amaranthus spinosus
Aster, slender*	Aster subulatus
Barnyardgrass <sup>2</sup>	Echinochloa crus-galli
Bedstraw, catchweed*	Galium aparine
Beggarweed, Florida	Desmodium tortuosum
Broomweed, common*	Gutierrezia dracunculoides
Buckwheat, wild	Polygonum convolvulus
Buffalobur	Solanum rostratum
Burcucumber	Sicyos angulatus
Buttercup, corn*	Ranunculus arvensis
Buttercup, hairy*	Ranunculus sardous
	(continued)

Table 4. Weed Control List (continued)

Common Name	Scientific Name
Annual Weeds (continued)	
Buttercup, roughseed*	Ranunculus muricatus
Buttercup, Western field*	Ranunculus occidentalis
Carpetweed	Mollugo verticillata
Catchfly, nightflowering*	Silene noctiflorum
Chamomile, corn*	Anthemis arvensis
Chickweed, common*	Stellaria media
Clover, annual*	Trifolium spp.
Cockle, corn*	Agrostemma githago
Cockle, cow*	Vaccaria pyramidata
Cocklebur, common	Xanthium strumarium
Croton, tropic	Croton glandulosus
Croton, woolly*	Croton capitatus
Daisy, English*	Bellis perennis
Devil's claw	Proboscidea Iouisianica
Eveningprimrose, cutleaf*	Oenothera laciniata
Fleabane, annual*	Erigeron annuus
Flixweed*	Descurainia sophia
Foxtail, giant <sup>2</sup>	Setaria faberi
Foxtail, green <sup>2</sup>	Setaria viridis
Foxtail, yellow <sup>2</sup>	Setaria glauca
Goosefoot, nettleleaf*	Chenopodium murale
Henbit*	Lamium amplexicaule
Jimsonweed	Datura stramonium
Johnsongrass, seedling <sup>2</sup>	Sorghum halepense
Knotweed, prostrate	Polygonum aviculare
Kochia	Kochia scoparia
Ladysthumb	Polygonum persicaria
Lambsquarters, common	Chenopodium album
Lettuce, prickly*	Lactuca serriola
Mallow, Venice	Hibiscus trionum
Marestail (Horseweed)	Conyza canadensis
Mayweed*	Anthemis cotula
Morningglory, entireleaf	Ipomoea hederacea var. integriuscula
Morningglory, ivyleaf	Ipomoea hederacea
Morningglory, pitted	Ipomoea lacunosa
Morningglory, smallflower	Jacquemontia tamnifolia
Morningglory, tall	Ipomoea purpurea
Mustard, tall*	Sisymbrium loeselli
Mustard, tansy*	Descurainia pinnata
Mustard, wild*	Sinapis arvensis
Mustard, yellowtop*	Sinapis spp.
Nightshade, black	Solanum nigrum
Nightshade, Eastern black	Solanum ptycanthum
Nightshade, hairy	Solanum sarrachoides
	(continued)

(continued)

Table 4. Weed Control List (continued)

Common Name	Scientific Name
Annual Weeds (continued)	
Panicum, fall <sup>2</sup>	Panicum dichotomiflorum
Pennycress, field*	Thlaspi arvense
Pepperweed, Virginia*	Lepidium virginicum
Pigweed, Palmer	Amaranthus palmeri
Pigweed, prostrate	Amaranthus blitoides
Pigweed, redroot	Amaranthus retroflexus
(Carelessweed)	
Pigweed, rough	Amaranthus retroflexus
Pigweed, smooth	Amaranthus hybridus
Pigweed, spiny	Amaranthus spinosus
Pigweed, tumble	Amaranthus albus
Pineappleweed*	Matricaria matricarioides
Poorjoe*	Diodia teres
Puncturevine*	Tribulus terrestris
Purslane, common	Portulaca oleracea
Pusley, Florida*	Richardia scabra
Radish, wild*	Raphanus raphanistrum
Ragweed, common	Ambrosia artemisiifolia
Ragweed, giant (Buffaloweed)	Ambrosia trifida
Ragweed, lanceleaf*	Ambrosia bidentata
Sesbania, hemp	Sesbania exaltata
Shattercane <sup>2</sup>	Sorghum bicolor
Shepherd's purse	Capsella bursa-pastoris
Sicklepod	Cassia obtusifolia
Sida, prickly (Teaweed)	Sida spinosa
Signalgrass, broadleaf <sup>2</sup>	Urochloa platyphylla
Smartweed, green*	Polygonum scabrum
Smartweed, Pennsylvania	Polygonum pensylvanicum
Smellmelon	Cucumis melo
Sneezeweed, bitter*	Helenium amarum
Sowthistle, annual	Sonchus oleraceus
Sowthistle, spiny*	Sonchus asper
Spurge, leafy*	Euphorbia esula
Spurge, prostrate	Chamaesyce humistrata
Spurry, corn*	Spergula arvensis
Starbur, bristly*	Acanthospermum hispidum
Sumpweed, rough*	lva ciliata
Sunflower, common (wild)	Helianthus annuus
Sunflower, volunteer	Helianthus annuus
Thistle, Russian	Salsola iberica
Velvetleaf	Abutilon theophrasti
Waterhemp, common	Amaranthus rudis
Waterhemp, tall	Amaranthus tuberculatus
Waterprimrose, winged*	Ludwigia decurrens

Table 4. Weed Control List (continued)

Common Name	Scientific Name
Annual Weeds (continued)	
Wormwood*	Artemisia annua
Vetch, hairy*	Vicia villosa
Biennial Weeds	
Burdock, common*	Arctium minus
Carrot, wild*	Daucus carota
(Queen Anne's lace)	
Cockle, white*	Melandrium album
Eveningprimrose, common*	Oenothera biennis
Geranium, Carolina*	Geranium carolinianum
Gromwell*	Lithospermum spp.
Knapweed, diffuse*	Centaurea diffusa
Knapweed, spotted	Centaurea maculosa
Mallow, dwarf*	Malva borealis
Parsnip, wild*	Pastinaca sativa
Plantain, bracted*	Plantago aristata
Ragwort, tansy*	Senecio jacobaea
Starthistle, yellow*	Centaurea solstitialis
Sweetclover*	Melilotus spp.
Teasel*	Dipsacus sativus
Thistle, bull*	Cirsium vulgare
Thistle, musk*	Carduus nutans
Thistle, plumeless*	Carduus acanthoides
Perennial Weeds	
Alfalfa <sup>1</sup>	Medicago sativa
Bindweed, field <sup>1</sup>	Convolvulus arvensis
Bindweed, hedge <sup>1</sup>	Calystegia sepium
Buckbrush*	Ceanothus cuneatus
Buttercup, bulbous*	Ranunculus bulbosus
Buttercup, creeping*	Ranunculus repens
Clover, white <sup>1</sup>	Trifolium repens
Daisy, oxeye*	Leucanthemum vulgare
Dandelion, common <sup>1</sup>	Taraxacum officinale
Dock, broadleaf <sup>1</sup>	Rumex obtusifolius
Dock, curly <sup>1</sup>	Rumex crispus
Dogbane, hemp <sup>1</sup>	Apocynum cannabinum
Dogfennel (Cypressweed)*	Eupatorium capillifolium
Goldenrod, Canada*	Solidago canadensis
Goldenrod, Missouri*	Solidago missouriensis
Goldenrod, rigid*	Oligoneuron rigidum
Horsenettle, Carolina <sup>1</sup>	Solanum carolinense
Knapweed, spotted <sup>1</sup>	Centaurea maculosa
Lespedeza, sericea*	Lespedeza cuneata
Milkweed, climbing*	Funastrum cyanchoides
Milkweed, common <sup>1</sup>	Asclepias syriaca
Milkweed, honeyvine <sup>1</sup>	Ampelamus albidus
	(a a -a ti a a -1)

(continued)

Table 4. Weed Control List (continued)

	,
Common Name	Scientific Name
Perennial Weeds (continued)	
Nightshade, silverleaf <sup>1</sup>	Solanum elaeagnifolum
Plantain, broadleaf <sup>1</sup>	Plantago major
Plantain, buckhorn*	Plantago lanceolata
Pokeweed <sup>1</sup>	Phytolacca americana
Potato, volunteer <sup>1</sup>	Solanum tuberosum
Ragweed, western*	Ambrosia psilostachya
Sensitive-briar, catclaw*	Mimosa nuttallii
Skeletonweed, rush*	Chondrilla juncea
Smartweed, swamp <sup>1</sup>	Polygonum coccineum
Sneezeweed, common*	Helianthus autumnale
Sowthistle, perennial <sup>1</sup>	Sonchus arvensis
Thistle, Canada <sup>1</sup>	Cirsium arvense
Yankeeweed*	Eupatorium compositifolium
Yarrow, common*	Achillea millefolium
10 0 0 0 0	

Partially controlled or suppressed

<sup>2</sup> **Distinct® herbicide** provides suppression of annual grass weeds at appropriate rates. Emerged grass up to 3-inches tall will stop growing but may remain green for weeks after application. Regrowth of grass is limited when crop canopies over row middles.

<sup>\*</sup> Not controlled in California

# **Conditions of Sale and Warranty**

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 must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF 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.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND BASF'S EXCLUSIVE LIABILITY, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL BE LIMITED TO REPAYMENT OF THE PURCHASE PRICE OF THE PRODUCT.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BASF AND THE SELLER DISCLAIM ANY LIABILITY FOR CONSEQUENTIAL, EXEMPLARY, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

BASF 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 BASF.

Arsenal, Banvel, Basagran, Celebrity, Clarity,
Distinct, Facet, Outlook, Pendulum, Plateau, and
Sahara are registered trademarks of BASF Corporation.

AquaCap and G-Max Lite are trademarks of BASF.

Accent, Ally, Escort, Oust, and Telar are registered trademarks of E.I. duPont de Nemours and Company.

Ambush, Dual II Magnum, and NorthStar are registered trademarks of a Syngenta Group Company.

**Garlon, Grazon, Redeem, Remedy, Stinger, Tordon, Transline**, and **Vista** are registered trademarks of Dow AgroSciences LLC.

**Harness** is a registered trademark of Monsanto Technology LLC.

**Hornet**, **Lorsban**, and **Surpass** are registered trademarks of Dow AgroSciences LLC.

**Option** is a registered trademark of Bayer.

**Shotgun** is a registered trademark of Platte Chemical Company.

**Weedone** is a registered trademark of Nufarm Inc.

© 2019 BASF Corporation All rights reserved.

007969-00150.20190502.**NVA 2019-04-078-0070** 

Supersedes: NVA 2014-04-078-0128

BASF Corporation 26 Davis Drive Research Triangle Park, NC 27709

