U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460	EPA Reg. Number: 264-1173	Date of Issuance: 01/13/2015
NOTICE OF PESTICIDE: <u>X</u> Registration <u>Reregistration</u>	Term of Issuance: Unconditional	
(under FIFRA, as amended)	Name of Pesticide Product: DiFlexx Herbicide	
Name and Address of Registrant (include ZIP Code): Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, NC 27709		
<b>Note:</b> Changes in labeling differing in substance from that accepted in connection with this registration Registration Division prior to use of the label in commerce. In any correspondence on this product al		
<ul> <li>On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.</li> <li>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.</li> <li>This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:</li> <li>1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit such data.</li> <li>2. Make the following label changes before you release the product for shipment: <ul> <li>Revise the EPA Registration Number to read, "EPA Reg. No. 264-1173."</li> </ul> </li> <li>3. Submit one copy of the revised final printed label for the record before you release the product for shipment.</li> </ul>		
Signature of Approving Official:	Date:	
Kathryn V. Montague, Product Manager 23 Herbicide Branch, Registration Division (7505P) EPA Form 8570-6 Registration Notice Unconditional v.20141114	01/13/2	2015

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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.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 08/08/2014
- Alternate CSF "A01.1" dated 08/09/2014
- Alternate CSF "A02.1" dated 08/10/2014
- Alternate CSF "A03.1" dated 08/11/2014
- Alternate CSF "A04.1" dated 08/12/2014
- Alternate CSF "A05.1" dated 08/13/2014
- Alternate CSF "A06.1" dated 08/14/2014

If you have any questions, please contact Beth Benbow at (703) 347-8072 or benbow.bethany@epa.gov.

Sincerely,

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Kathryn V. Montague, Product Manager 23 Herbicide Branch Registration Division (7505P) Office of Pesticide Programs

Attachment



Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 264-1173

Group

4

Herbicide

# **DIFLEXX®** Herbicide

Intended for: A Herbicide for weed control in field corn grown for grain, seed and silage, popcorn, and for fallow croplands.
ACTIVE INGREDIENT:
Diglycolamine salt of 3,6-dichloro-Q-anisic acid\*
OTHER INGREDIENTS:
43.40%
TOTAL:
100.00%

\*Contains 38.4% 3,6-dichloro-Q-anisic acid (4 pounds acid equivalent per gallon or 480 grams per liter).

### EPA Reg. No. 264-XXXX

EPA Est.

# KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT USE</u> Information Call 1-800-331-2867

**Net Contents:** 

# **PRODUCED FOR**



Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Drive Research Triangle Park, North Carolina 27709 1-866-99BAYER (1-866-992-2937)

# **FIRST AID**

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes.
	Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice .
IF SWALLOWED:	Call a poison control center or doctor immediately for treatment advice .
	Have person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything to an unconscious person.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
	ergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. t container or label with you when calling a poison control center or doctor, or going for treatment.

# PRECAUTIONARY STATEMENTS

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

- Causes moderate eye irritation.
- Harmful if swallowed or absorbed through skin.
- Avoid contact with skin, eyes or clothing.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are nitrile rubber and butyl rubber. If you want more options, follow the instructions for Category C on an EPA chemical-resistance category selection chart.

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

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves (except for pilots);
- Shoes plus socks.

See Engineering Controls Statement for additional requirements. 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.

# **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).

# USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

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

# **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate. Apply this product only as directed on the label. This chemical is known to leach through soil into ground water 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 ground water contamination.

#### 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), sink holes, 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 11 0% 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 wash waters, 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 requierments regaurding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices rnust 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 ground water contamination. Ground water contamination may occur in areas where soils are permeable or coarse and ground water is near the surface. Do not apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow. To minimize the possibility of ground water contamination, carefully follow application rate recommendations as affected by soil type in the general information section of this label.

#### Movement by water erosion of treated soil

Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least one-half inch rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

#### **Endangered Species Concerns**

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.

# CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. To the extent consistent with applicable law, all such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE'S ELECTION, THE REPLACEMENT OF PRODUCT.

# DIRECTIONS FOR USE

#### It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product.

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

For Important crop safety information, refer to the Use Directions section under the specific crop.

# 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, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), notification to workers, 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

# **PRODUCT INFORMATION AND INSTRUCTIONS**

DIFLEXX<sup>®</sup> Herbicide:

- may be used for preemergence or postemergence selective control of annual broadleaf weeds and control or suppression of
  many biennial and perennial broadleaf weeds in corn (field corn, field corn grown for silage, white corn, seed corn, popcorn), and
  fallow croplands.
- may be used sequentially or in tank mixtures to provide a complete weed control program.

# **USE RESTRICTIONS**

- Maximum seasonal use rate: Refer to specific use directions in each for crop-specific maximum seasonal use rates. Do not exceed 64 fluid ounces of this product (2 pounds acid equivalent) per acre, per year.
- Pre harvest Interval (PHI): Refer to the CROP-SPECIFIC INFORMATION section and then under each crop for the pre harvest interval specific for the crop.
- Restricted-Entry Interval (REI): 24 hours
- Rainfast Period: Rainfall or irrigation occurring with 4 hours after post emergence applications may reduce the effectiveness of DIFLEXX Herbicide.
- DO NOT apply to crops under stress due to lack of moisture, hail damage, flooding, herbicide damage, mechanical injury, insects or widely fluctuating temperatures as injury may result.
- DO NOT apply through any type of irrigation equipment.
- DO NOT treat irrigation ditches or water used for crop irrigation or domestic purposes

# **RESISTANCE MANAGEMENT RECOMMENDATIONS**

DIFLEXX Herbicide contains an active ingredient with a mode of action classified as a Group 4 Herbicide, i.e., a synthetic auxin. DIFLEXX Herbicide is readily absorbed by leaves, shoots and roots, translocates throughout the plant, and accumulates in sensitive plant's growing points. DIFLEXX Herbicide controls weeds by affecting cell wall plasticity and nucleic acid metabolism leading to uncontrolled cell division and growth, ultimately causing vascular tissue destruction and plant death.

Naturally occurring biotypes of certain weed species with resistance to a variety of herbicide modes of action (triazine, ALS, PPO, glyphosate, auxin, HPPD, etc.) are known to exist. Repeated use of herbicides having similar modes of action allow resistant weed species to be selected and spread. To manage the selection and spread of resistant weed populations, it is important to implement herbicide diversity into the weed management program. Effective tools to implement diversity include rotation of crops (diversifies weed management tools), rotation of herbicide-tolerant traits where possible [alternate herbicide-tolerant (HT) traits and/or use HT trait stacks for more efficient herbicide rotation] and rotation of effective herbicide modes of action at labeled rates (reduces the selection pressure of a single mode of action by using multiple modes of action during both the growing season and from year to year).

#### Integrated Pest (Weed) Management (IPM)

DIFLEXX Herbicide may be integrated into an overall weed and pest management strategy whenever the use of a herbicide is required.

Repeated use of any crop protection product may increase the development of resistant strains of weeds. To delay herbicide resistance:

- Tillage, crop competition, etc. and herbicide use, weed scouting, proper application rates, application timing, spray gallonages, etc., should be followed wherever possible.
- Consult local agricultural authorities for additional IPM strategies established in your area.

# SPRAY 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: The distance of the outer most operating nozzles on the boom must not exceed <sup>3</sup>/<sub>4</sub> the length of the rotor. 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 must be observed.

The applicator should be familiar with and take into account the information covered in the following Aerial Drift Reduction Advisory. [This information is advisory in nature and does not supersede mandatory label requirements.]

#### Aerial Drift Reduction Advisory

#### 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 air stream 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 that is designed for the intended application. With most nozzles 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 feet 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 downwind. 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.).

#### 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 local, low level 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 the 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.

#### Wind

Drift potential is lowest between wind speeds of 2 to 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.

#### Sensitive Areas

The pesticide should only be applied when the potential for drift to adjacent 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).

#### **APPLICATION INFORMATION**

DIFLEXX Herbicide can be applied to actively growing weeds as aerial, broadcast, band or spot spray applications using water or sprayable fertilizer as a carrier. For general DIFLEXX Herbicide application rates for control or suppression by weed type and growth stage, see Table 2. DIFLEXX Herbicide Application Rates for Control or Suppression by Weed Type and Growth Stage. For crop-specific application timings and other details, refer to the SPECIFIC CROP USE RECOMMENDATIONS section of the label.

#### Coverage

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage. To avoid uneven spray coverage, DIFLEXX Herbicide should not be applied during periods of gusty wind or when wind is in excess of 15 mph. Avoid off-target movement. Use extreme care when applying DIFLEXX Herbicide to prevent injury to desirable plants and shrubs.

#### 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.

#### **Sensitive Crop Precautions**

DIFLEXX Herbicide may cause injury to desirable trees and plants, particularly beans, cotton, flowers, fruit trees, grapes, ornamentals, peas, potatoes, soybeans, sunflowers, tobacco, tomatoes, and other broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to DIFLEXX Herbicide during their development or growing stage.

#### **Recommendations to Avoid Herbicide Drift**

- Use coarse sprays (volume median diameter of 400 microns or more) to avoid potential herbicide drift. Select nozzles that are designed to produce minimal amounts of fine spray particles (less than 200 microns).
- Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gallons per acre (for ground broadcast applications), unless otherwise required by the manufacturer of drift-reducing nozzles. Consult your spray nozzle supplier concerning the choice of drift-reducing nozzles.
- Agriculturally approved drift-reducing additives may be used.

#### Aerial application Methods and Equipment

#### Water Volume

Use 1 to 10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

#### **Application Equipment**

Select nozzles designed to produce minimal amounts of fine spray particles. Make aerial applications at the lowest safe height to reduce exposing the spray to evaporation and wind.

The applicator must follow the most restrictive use cautions to avoid drift hazards, including those found in this labeling, as well as state and local regulations and ordinances.

DO NOT use aerial equipment if spray particles can be carried by the wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

#### Ground Application (Banding)

When applying DIFLEXX Herbicide by banding, determine the amount of herbicide and water volume needed using the following formula:

Band width in inches x Broadcast rate per acre = Banding herbicide rate per acre Row width in inches

Band width in inches x Broadcast volume per acre = Banding water volume per acre Row width in inches

#### Ground Application (Broadcast)

#### Water Volume

Use 3 to 50 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

#### Application Equipment

Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

#### TABLE 1. DIFLEXX Herbicide Application Rates for Control or Suppression by Weed Type and Growth Stage

Use rate limitations are in the SPECIFIC CROP USE RECOMMENDATIONS Section of the label.

Weed Type and Stage	Rate Per Acre (fl. oz.)
Annual <sup>1</sup>	
Small actively growing	8-16
Established weed growth	16-24
Biennial	
Rosette diameter 1 to 3"	8 to 16
Rosette diameter 3" or more	16 to 32
Bolting	32
Perennial	
Top growth suppression	8 to 16
Top growth control and root suppression	16 to 32
Noted perennials	32
Other perennials	32

<sup>1</sup> Rates below 8 fluid ounces per acre may provide control or suppression but should typically be applied with other herbicides that are effective on the same species and biotype.

#### **Spray Additives**

DIFLEXX Herbicide is a suspension concentrate. To improve post emergence weed control, agriculturally approved surfactants and nitrogen sources (sprayable grade fertilizer such as urea ammonium nitrate, or ammonium sulfate) may be added, particularly in dry growing conditions (Refer to Table 2. Spray Additive Products and Rates).

#### Nitrogen Source

- Urea ammonium nitrate (UAN): Use 2 to 4 quarts of UAN (commonly referred to as 28%, 30% or 32% nitrogen solution) per acre. Do not use brass or aluminum nozzles when spraying UAN.
- Ammonium Sulfate (AMS): AMS at 1.25 to 2.5 pounds per acre (8.5 to 17.5 pounds per 100 gallon of water) may be substituted for UAN. Use high quality AMS (spray grade) to avoid plugging of nozzles. Other sources of nitrogen are not as effective as those mentioned. Bayer CropScience does not recommend applying AMS, if applied in less than 10 gallons per acre because of potential problems with precipitation in reduced volumes. Use AMS only if it has been demonstrated to be successful in local experience.

#### Table 2. Additive Products And Rates

Adjuvant		Nitrogen Source
NIS (Nonionic Surfactant) (0.25% v/v or 1 qt/100 gallons)	+	
COC (1.0% v/v or 1 gal/100 gallons)	+	UAN (2 to 4 qt/A) or
MSO (1.0% v/v or 1 gal/100 gallons)	+	AMS (8.5 to 17 lb/100 gallon)

## COMPATIBILITY TESTING AND TANK MIX PARTNERS

- Before mixing components, always perform a compatibility jar test.
- For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust accordingly. Only use water from the intended source at the source temperature.
- Add components in the sequence indicated in the Mixing Order Instructions section using 2 teaspoons for each pound or 1 teaspoon for each pint of label rate per acre.
- Always cap the jar and invert 10 cycles between component additions.
- When the components have all been added to the jar, let the solution stand for 15 minutes. Evaluate the solution for uniformity
  and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor
  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.

#### **Order of Mixing**

DIFLEXX Herbicide may be used with other pesticides, fertilizers, and micronutrients. The proper mixing procedure for DIFLEXX Herbicide alone or in tank mix combinations with other pesticides is:

- 1. Water. Begin by agitating a thoroughly clean sprayer tank three-quarters full of clean water.
- 2. Agitation. Maintain constant agitation throughout mixing and application
- 3. Inductor. If an inductor is used, rinse it thoroughly after each component has been added.
- 4. Products in PVA bags. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all watersoluble PVA bags have been dissolved and the product is evenly mixed in the spray tank before continuing.
- Add DIFLEXX Herbicide and other water-dispersible products (dry flowables, wettable powders, suspension concentrates, or suspoemulsions)
- 6. Water-soluble products.
- 7. Emulsifiable concentrates (such as oil concentrate when applicable).
- 8. Water-soluble additives (such as AMS or UAN when applicable).
- 9. Remaining quantity of water.

Maintain constant agitation during application.

#### **Tank Cleanout Prodcedures**

(Cleaning Equipment Following DIFLEXX Herbicide Application)

To avoid injury or exposure to non-target crops, thoroughly clean all mixing and spray equipment, including pumps, nozzles, lines and screens, by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions, and then triple rinsing the equipment before and after spraying this product.

#### **Product Tank Mixing Information**

Unless otherwise prohibited on this label or the label of an intended tank mix product, DIFLEXX Herbicide may be applied in combinations with any pesticide registered for the same crop, timing and method of application. See the **SPECIFIC CROP USE RECOMMENDATIONS** section for more details. Always 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.

# **ROTATIONAL CROP RESTRICTIONS**

The interval between application and planting rotational crops is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradations of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

- Planting/replanting restrictions for DIFLEXX Herbicide applications of 24 fluid ounces per acre or less: Corn can be replanted immediately following an application of DIFLEXX herbicide (care should be taken that corn seed does not come into direct contact with the herbicide). The rotational interval is 60 days for barley, cotton, oat, sorghum, soybean and wheat and 120 days for all other crops.
- Planting/replanting restrictions for DIFLEXX Herbicide applications of more than 24 fluid ounces and up to 64 fluid ounces per acre: Corn, sorghum, cotton (east of Rocky Mountains) and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat and other grass seedlings grown east of the Mississippi River may be planted 60, 90 and 120 days following DIFLEXX Herbicide application rates of 24-32, 33-48, and 49-64 fluid ounces/acre, respectively. Barley, oat, wheat and other grass seedlings grown west of the Mississippi River may be planted 60, 90, 135 and 180 days following DIFLEXX Herbicide application rates of 16, 17-32, 33-48, and 49-64 fluid ounces/acre, respectively. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

### WEEDS CONTROLLED

DIFLEXX Herbicide applied at the listed rates will control a broad array of important annual broadleaf weeds, including biotypes resistant to glyphosate-, triazine-, PPO-, ALS- and HPPD-inhibiting herbicides. DIFLEXX herbicide will also control or suppress many biennial and perennial broadleaf weeds. Refer to Table 3 for a listing of weeds controlled. The best level of weed control will be achieved when weeds are small (1-3 inches tall) and actively growing. Use the rates found in Table 1 (DiFlexx Herbicide Application Rates for control or suppression by weed type and growth stage section of the label); however, do not exceed the maximum single application rate listed in the Specific Use Directions for the use site being treated.

Table 3. Weed List (Including Gl	phosate-, Triazine-, PPO-, AL	S- and HPPD-Resistant Biotypes
ANNUALS	ANNUALS (cont.)	PERENNIALS
Alkanet	Pigweed, Prostrate, Redroot	Alfalfa <sup>1</sup>

Amaranth, Palmer, Powell Spiny Aster, Slender Bedstraw, Catchweed Beggarweed, Florida Broomweed, Common Buckwheat, Tartary, Wild Buffalobur Burclover, California Burcucumber Buttercup, Corn, Creeping, Roughseed, Western Field Carpetweed Catchfly, Nightflowering Chamomile, Corn Chervil, Bur Chickweed, Common Clovers Cockle, Corn, Cow, White Cocklebur, Common

(Carelessweed), Rough, Smooth, Tumble Pineappleweed Poorjoe Poppy, Red-horned Puncturevine Purslane, Common Pusley, Florida Radish, Wild Raqweed, Common, Giant (Buffaloweed), Lance-Leaf Rocket, London, Yellow Rubberweed, Bitter (Bitterweed) Salsify Senna, Coffee Sesbania, Hemp Shepherdspurse Sicklepod Sida, Prickly (Teaweed)

Artichoke, Jerusalem Aster, Spiny, Whiteheath Bedstraw, Smooth Bindweed, Field, Hedge Blueweed, Texas Bursage, Woollyleaf<sup>1</sup> (Bur Ragweed, Povertyweed) Buttercup, Tall Campion, Bladder Chickweed, Field, Mouseear Chicory<sup>1</sup> Clover<sup>1</sup>, Hop Dandelion<sup>1</sup> Dock<sup>1</sup>, Broadleaf (Bitterdock), Curly Dogbane, Hemp Dogfennel<sup>1</sup> (Cypressweed)

#### Table 3. General Weed List (Including Glyphosate-, Triazine-, PPO-, ALS- and HPPD-Resistant Biotypes (continued)

ANNUALS Copperleaf. Hophornbeam Cornflower (Batchelor button) Croton, Tropic, Woolly Daisy, English Dragonhead, American Eveningprimrose, Cutleaf Falseflax, Smallseed Fleabane, Annual Flixweed Fumitory Goosefoot, Nettleleaf Hempnettle Henbit Jacobs-Ladder Jimsonweed Knawel (German Moss) Knotweed, Prostrate Kochia Ladvsthumb Lambsquarters, Common Lettuce, Miners, Prickly Mallow, Common, Venice Marestail (Horseweed) Mayweed Morningglory, Ivyleaf, Tall Mustard, Black, Blue, Tansy, Treacle, Tumble, wild, Yellowtops Nightshade, Black, Cutleaf Pennycress, Field (Fanweed, Frenchweed, Stinkweed) Pepperweed, Virginia (Peppergrass)

### ANNUALS (cont.) Smartweed, Green,

Pennsylvania Sneezeweed, Bitter Sowthistle, Annual, Spiny Spanish Needles Spikeweed, Common Spurge, Prostrate, Leafy Spurry, Corn Starbur, Bristly Starwort, Little Sumpweed, Rough Sunflower, Common (Wild) Volunteer Thistle, Russian Velvetleaf Waterhemp Waterprimrose, Winged Wormwood

#### BIENNIALS

Burdock, Common Carrot, Wild (Queen Anne's Lace) Cockle, White Eveningprimrose, Common Geranium, Carolina Gromwell Knapweed, Diffuse, Spotted Mallow, Dwarf Plantain, Bracted Ragwort, Tansy Starthistle, Yellow Sweetclover Teasel Thistle, Bull, Milk, Musk, Plumeless

PERENNIALS Fern. Bracken Garlic, Wild Goldenrod, Canada, Missouri. Goldenweed, Common Hawkweed Henbane, Black<sup>1</sup> Horsenettle, Carolina Ironweed Knapweed, Black, Diffuse, Russian<sup>1</sup>, Spotted Milkweed, Common, Climbing, Honeyvine, Western Whorled Nettle, Stinging Nightshade, Silverleaf (White Horsenettle) Onion, wild Plantain, Broadleaf, Buckhorn Pokeweed Ragweed. Western Redvine Sericea Lespedeza Smartweed, Swamp Snakeweed, Broom Sorrel<sup>1</sup>, Red (Sheep Sorrel) Sowthistle<sup>1</sup>, Perennial Spurge, Leafy, Sundrop, Halfshrub Eveningprimrose Thistle, Canada, Scotch Toadflax, Dalmation Tropical Soda Apple Trumpetcreeper (Buckvine) Vetch Violet, Wild Waterhemlock, Spotted Waterprimrose, Creeping Woodsorrel<sup>1</sup>, Creeping, Yellow Wormwood, Louisiana, Common Yankeeweed Yarrow, Common<sup>1</sup>

<sup>1</sup>Noted perennials may be controlled using lower rates of this product than those specified for other listed perennial weeds.

# SPECIFIC USE DIRECTIONS

# **CROP USE DIRECTIONS**

# CORN (FIELD, POP, SEED, AND SILAGE)

Not for use on sweet corn.

#### USE DIRECTIONS

DIFLEXX Herbicide can be applied pre-plant, pre-emergence, and post-emergence in corn for all tillage systems (e.g. no-tillage, reduced tillage and conventional).

Plant corn at least 1 ½ inches deep. Corn seed must be completely covered with soil and furrow firmed.

In rare instances, applications of DIFLEXX Herbicide during periods of rapid corn growth may result in temporary leaning of the crop. Corn will usually become erect within 3-7 days. Cultivation should be delayed until after corn is growing normally to avoid potential stalk breakage.

Before applying DIFLEXX Herbicide to seed corn or popcorn, verify the selectivity of DIFLEXX Herbicide on the inbred line or hybrid with your local seed corn or popcorn company (supplier). This precaution will help avoid potential injury to sensitive lines.

#### Maximum Season Use Rate

Do not apply more than a 16 fluid ounces per acre per application and a total of 24 fluid ounces per acre per year. Apply a maximum of two applications per growing season. Sequential applications must be separated by two (2) weeks or more.

#### Preharvest Interval

Corn forage may not be harvested within 45 days of the final DIFLEXX Herbicide application. Corn grain and stover may be harvested once the crop has reached the ensilage (milk) stage.

#### USE RECOMENDATIONS

Use of sprayable fluid fertilizer as the carrier is not recommended for applications of DIFLEXX Herbicide made after corn emergence.

Adjuvant and burndown tank mix partners are not recommended after corn emergence.

#### Preplant and Preemergence Applications in No Tillage, Reduced Tillage and Conventional Corn

Rates: Apply from 8-16 fluid ounces per acre of DIFLEXX Herbicide. Use the higher rates in the rate range on soils high in organic matter or under certain weed conditons (See higher rate recommendations listed under the **Post-emergence Application in All Tillage** Systems section.

#### Timing

DIFLEXX Herbicide can be applied up to 14 days before, during or after planting a corn crop. DIFLEXX will control emerged labeled weeds and provide residual control of many weeds. When additional residual control is desired, a tank mixture with residual herbicides such as Corvus®, Balance®Flexx, atrazine or other registered residual herbicides may be used. COC or MSO at 1%v/v are recommended for burndown of labeled weeds 6" or less in height. When weeds are greater than 6" in height or weeds not controlled by DIFLEXX Herbicide are present, the addition of a burndown herbicide (e.g., Liberty®, glyphosate) is recommended. Observe directions for use, precautions and restrictions, and adjuvants on the label of the residual or burndown tank mixed herbicides.

#### Post-emergence Application in All Tillage Systems

Rates: Apply from 8 to 16 fluid ounces per acre of DIFLEXX Herbicide. Use higher rates in this range when one or more of the following situations are present:

- Weeds with known resistance (ALS, PPO, glyphosate, triazine, HPPD, etc.) to herbicides in tank mix with DIFLEXX Herbicide
- Weeds not controlled by tank mix partners
- Heavy weed populations
- Biennial/perennial weeds listed on the label
- Annual weeds taller than 6"

#### Timing

**Broadcast Spray Application**: Apply DIFLEXX Herbicide as a broadcast spray when corn is at spike through the V6 stage of growth (6 leaf collar) or 36" tall, whichever occurs first. Early post emergence application is recommended for best weed control (weeds less than 3" tall) and crop yield potential.

**Directed Spray Application:** Directed spray applications may be made when corn is from the V7 thru V10 stages of growth (7-10 leaf collar), up to 36" tall, or is15 days prior to tassel, whichever occurs first. Directed sprays should also be used if corn leaves prevent proper spray coverage, sensitive crops are growing nearby, or tank mixing with 2,4-D. **DO NOT** apply DIFLEXX Herbicide when soybeans are growing nearby if any of these conditions exist:

- Corn is more than 24" tall
- Soybean are more than 10" tall
- Soybean have begun to bloom

#### **Corn Tank Mixes or Sequential Uses**

DIFLEXX Herbicide should be a part of an integrated pest control program that may include herbicides, insecticides and/or fungicides applied prior to, in tank mix with, or following a DIFLEXX Herbicide application. When using tank mix or sequential applications with DIFLEXX Herbicide, always follow the companion product label to determine specific use rates, application timings and pest controlled. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products.

#### Tank Mixtures for Weed Control

Possible tank mix partners with DIFLEXX Herbicide may include but are not limited to the following herbicides:

Autumn Super 51WDG™	Balance® Flexx	Capreno®
Corvus®	Glyphosate (Roundup Ready® corn hybrids only)	-
Laudis®	Liberty® (LibertyLink® corn hybrids only)	

#### **Tank Mixtures for Insect Control**

To provide weed and insect control in corn, DIFLEXX Herbicide may be used sequentially with all soil-applied insecticides or used sequentially or in tank mix with most foliar-applied insecticides including Baythroid® XL, Belt®, Oberon®, and other registered foliar insecticides. **DO NOT** apply DIFLEXX Herbicide in tank mixtures with Lorsban® /chlorpyrifos insecticide. If DIFLEXX Herbicide is used sequentially with foliar insecticides, applications should be separated by at least 7 days.

#### Tank Mixtures for Disease Control

To provide weed and disease control in corn, possible sequential or tank mix partners with DIFLEXX Herbicide may include but are not limited to the following fungicides:

Stratego® YLD

**Prosaro**®

# FALLOW (BETWEEN CROP APPLICATIONS)

#### Preplant Directions (Postharvest, Fallow, Crop Stubble, Set-Aside) For Broadleaf Weed Control

DIFLEXX Herbicide can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply DIFLEXX Herbicide as a broadcast or spot treatment to emerged and actively growing weeds after the crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See the **ROTATIONAL CROP RESTRICTIONS** section of the label for the required interval between application and planting to prevent crop injury.

#### **Rates and Timings**

Apply 4 to 32 fluid ounces of DIFLEXX Herbicide per acre. Refer to **Table 2** to determine use rates for specific targeted weed species. For best performance, apply DIFLEXX Herbicide when annual weeds are less than 3" tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment. The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if DIFLEXX Herbicide is applied when the majority of weeds have at least 4" to 6" regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for DIFLEXX Herbicide. For seedling control, a follow-up program or other cultural practices could be instituted.

Do not apply more than 32 fluid ounce per acre per application and a total of 64 fluid ounces per acre per year.

#### **Fallow Tank Mixtures**

DIFLEXX Herbicide should be a part of an integrated weed control program. In tank mixes with one or more herbicides, apply 4-16 fluid ounces of DIFLEXX Herbicide per acre for control of annual weeds, or 16-32 fluid ounces of DIFLEXX Herbicide for control of biennial and perennial weeds. These products may include but are not limited to the following herbicides:

Atrazine	Laudis®
Autumn Super 51WDG™	Metribuzin
Corvus®	2,4-D
Glyphosate	

When using tank mix or sequential applications with DIFLEXX Herbicide, always follow the companion product label to determine specific use rates by soil type, weed species, and weed or crop growth stage. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products.

#### **Tank Mix Instructions**

DIFLEXX Herbicide should be a part of an integrated weed control program that may include herbicides applied prior to, in tank mix with, or following a DIFLEXX Herbicide application. When using tank mix or sequential applications with DIFLEXX Herbicide, always follow the companion product label to determine specific use rates by soil type, weed species, and weed or crop growth stage. In addition, follow precautions and restrictions including state and local use restrictions that may apply to specific products. See Specific Guidelines for Tank Mixes or Sequential Use Programs for limitations or restrictions that apply for tank mix or sequential use programs containing additional products that may be used with DIFLEXX Herbicide.

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. This product may not be mixed, loaded, or used within 50 feet of all wells including abandoned wells, drainage wells, and sinkholes.

#### Pesticide storage

Groundwater contamination rnay be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides.

#### Pesticide disposal

Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to federal, state, or local procedures under Subtitle C of the Resourse Conservation and Recovery act. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law.

#### 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 :s: 5 gallons) as follows**: Empty the remaining contents into application equipment or a mix tank and drain for 1 0 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank, or store rinsate for later use or disposal. Drain for 1 0 seconds after the flow begins to drip. Repeat this procedure two more times.

**Triple rinse containers too large to shake (capacity > 5 gallons) as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 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. 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.

**Refillable Container**. Refill this container with pesticide only. DO NOT reuse this container for any other purpose. Triple rinsing the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

**Triple rinse as follows**: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 1 0% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

When this container is empty, replace the cap and seal all openings that have been opened during use; return the container to the point of purchase or to a designated location. This container must only be refilled with a pesticide product. DO NOT reuse the container for any other purpose. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transport. DO NOT transport if this container is damaged or leaking. If the container is damaged, or leaking, or obsolete and not returned to the point of purchase or to a designated location, triple rinse emptied container and offer for recycling, if available, or dispose of container in compliance with state and local regulations.

DiFlexx Herbicide (PENDING) 04/03/2014, 08/14/2014, 12/22/2014, 01/05/2015