GROUP 4 HERBICIDE

Container

DIFLEXX ®

#### SUSPENSION HERBICIDE

#### **AGRICULTURAL**

#### **ACTIVE INGREDIENT:**

Dicamba, present as diglycolamine salt...... 480 g/L

Contains 1,2-benzisothiazolin-3-one at 0.035% and 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0009% and 2-methyl-4-isothiazolin-3-one at 0.0003% as preservatives.

REGISTRATION NO. 32603 PEST CONTROL PRODUCTS ACT

**CAUTION - EYE IRRITANT** 

READ THE LABEL AND THE BROCHURE BEFORE USING

**KEEP OUT OF REACH OF CHILDREN** 

**NET CONTENTS:** 1 L to BULK

Product Information: 1-888-283-6847

www.cropscience.bayer.ca

Bayer CropScience Inc. Suite 200, 160 Quarry Park Blvd S.E. Calgary, Alberta T2C 3G3

In case of spills, poisoning or fire, telephone emergency response number 1-800-334-7577 (24 hours a day).

**NOTICE TO USER:** This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is

inconsistent with the directions on the label.

**DIRECTIONS FOR USE:** See the printed booklet provided with this container.

## **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or absorbed through the skin. May irritate eyes. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear a long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks during mixing, loading, application, clean-up and repair.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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

#### USER SAFETY RECOMMENDATIONS

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

Apply only when the potential for drift to areas of human habitation or activity such as houses, cottages, schools and recreational areas, taking into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or www.cropscience.bayer.ca.

#### **FIRST AID:**

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**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 by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.

**If inhaled:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**If in eyes:** Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice if irritation persists.

#### **TOXICOLOGICAL INFORMATION:**

Dicamba may cause severe irritation to the eyes and irritation to the skin and mucous membranes. Symptoms of overexposure to dicamba may include dizziness, muscle weakness, loss of appetite, weight loss, vomiting, decreased heart rate, shortness of breath, excitement, tenseness, depression, incontinence, cyanosis, muscle spasms, exhaustion and loss of voice. Treat symptomatically.

#### **ENVIRONMENTAL PRECAUTIONS AND INFORMATION:**

TOXIC to aquatic organisms and non-target terrestrial plants. Refer to the label booklet DIRECTIONS FOR USE (Section 9.2) for additional ENVIRONMENTAL PRECAUTIONS and observe BUFFER ZONES specified.

#### **STORAGE:**

Store in a cool, dry place. Do not store below freezing. Shake well before using.

Do not contaminate, water, food, or feed by storage and disposal. Store product in original container only and keep closed. Do not use or store in or around the home. To prevent contamination store this product away from food, feed, other pesticides, feeds, seeds or fertilizers.

## **DISPOSAL**

## **Recyclable Container**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

- 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
- 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

**Returnable Container:** Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

**Returnable-Refillable Container:** For disposal, this empty container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not use this container for any other purpose.

#### For non-recyclable Bag/Container

- 1. Thoroughly rinse the emptied plastic bag, or triple-rinse the empty container, and add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the plastic bag/container prior to its disposal.
- 3. Make the empty plastic bag/container unsuitable for further use.
- 4. Dispose of the plastic bag/container in accordance with provincial requirements.

## **Disposal of Unused, Unwanted Product:**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

™ DIFLEXX is a trademark of Bayer.

GROUP 4 HERBICIDE

**DIFLEXX** ®

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#### **AGRICULTURAL**

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Dicamba, present as diglycolamine salt...... 480 g/L

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#### **GENERAL INFORMATION**

#### **SECTION 1: NOTICE TO USER**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

## **SECTION 2: THE PRODUCT**

DIFLEXX provides selective control of annual broadleaf weeds and control or suppression of many biennial and perennial broadleaf weeds when applied pre-plant, preemergence or postemergence in field corn (grown for grain, silage or seed). DIFLEXX may be used sequentially or in tank mixtures to provide a complete weed control program.

#### SAFETY AND HANDLING

#### **SECTION 3:**

## PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT

#### PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN.

Harmful if swallowed or absorbed through the skin. May irritate eyes. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear a long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks during mixing, loading, application, clean-up and repair.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

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

#### **USER SAFETY RECOMMENDATIONS**

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

Apply only when the potential for drift to areas of human habitation or activity such as houses, cottages, schools and recreational areas, taking into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

If this pest control product is to be used on a commodity that may be exported and you require information regarding Maximum Residue Limits for an importing country, please contact Bayer CropScience Canada Inc. at 1-888-283-6847 or <a href="https://www.cropscience.bayer.ca">www.cropscience.bayer.ca</a>.

#### SECTION 4: FIRST AID AND TOXICOLOGICAL INFORMATION

#### **FIRST AID:**

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed	<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 do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 – 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control centre or doctor for further treatment advice.</li> </ul>
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15–20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control centre or doctor for treatment advice if irritation persists.</li> </ul>

## **TOXICOLOGICAL INFORMATION:**

Dicamba may cause severe irritation to the eyes and irritation to the skin and mucous membranes. Symptoms of overexposure to dicamba may include dizziness, muscle weakness, loss of appetite, weight loss, vomiting, decreased heart rate, shortness of breath, excitement, tenseness, depression, incontinence, cyanosis, muscle spasms, exhaustion and loss of voice.

Treat symptomatically.

## SECTION 5: ENVIRONMENTAL PRECAUTIONS AND INFORMATION

TOXIC to aquatic organisms and non-target terrestrial plants. Refer to DIRECTIONS FOR USE (Section 9.2) for additional ENVIRONMENTAL PRECAUTIONS and observe BUFFER ZONES specified.

## **SECTION 6: STORAGE**

Store in a cool, dry place. Do not store below freezing. Shake well before using. Do not contaminate, water, food, or feed by storage and disposal. Store product in original container only and keep closed. Do not use or store in or around the home. To prevent contamination store this product away from food, feed, other pesticides, feeds, seeds or fertilizers.

#### **SECTION 7: DISPOSAL**

## **Recyclable Container**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

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**Returnable-Refillable Container:** For disposal, this empty container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not use this container for any other purpose.

## For non-recyclable Bag/Container

- 1. Thoroughly rinse the emptied plastic bag, or triple-rinse the empty container, and add the rinsings to the spray mixture in the tank.
- 2. Follow provincial instructions for any required additional cleaning of the plastic bag/container prior to its disposal.

- 3. Make the empty plastic bag/container unsuitable for further use.
- 4. Dispose of the plastic bag/container in accordance with provincial requirements.

## **Disposal of Unused, Unwanted Product:**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

#### **DIRECTIONS FOR USE**

## **SECTION 8: CROPS AND WEEDS**

## 8.1 FIELD CORN (GROWN FOR GRAIN, SILAGE OR SEED)

Not for use on sweet corn.

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

Not all field corn hybrids or inbred lines are tolerant to auxin herbicides including DIFLEXX Use of this product must be approved by seed corn guides and/or contracting seed corn companies.

DIFLEXX may be used sequentially or in tank mixtures to provide a complete weed control program. Unless otherwise specified, do not use additives such as oil, wetting agents, emulsifiers, detergents, spreaders, sticking agents, or dispersing agents on corn with DIFLEXX.

Apply DIFLEXX or DIFLEXX tank-mixes in 180 to 350 litres of water/ha at a pressure of 150 to 275 kPa. Use coarse sprays.

Ground application only; DO NOT APPLY BY AIR.

Do not use on sandy or sandy loam soils. Apply to medium to fine textured soils containing more than 2.5% organic matter.

Avoid direct chemical contact with the corn seed. If you plan to apply DIFLEXX prior to corn emergence, be sure to place the corn seeds 4 cm or more below the soil surface. If seeds are planted less than 4 cm below the soil surface, delay application of DIFLEXX until the spike stage.

Do not incorporate. If applications are made during planting, apply DIFLEXX far enough behind the planting equipment to avoid incorporation by the planter wheel or other covering device. If soil crusting makes it necessary to use a rotary hoe after a preemergence treatment, delay hoeing the soil more than 1.3 cm deep.

A plant back interval of 120 days is required for those crops not on the DIFLEXX label, except for wheat, barley, oats and rye for which a plant back interval of 60 days is required.

Refer to Section 9 for additional application instructions and use limitations.

## 8.2 APPLICATION RATE, TIMING AND WEEDS CONTROLLED

Application of DIFLEXX at 600 mL - 1.25 L/ha and according to label recommendations will provide control of the following weed species:

Weeds Controlled	Application Timing	REMARKS
bindweed, field <sup>2</sup> buckwheat, Tartary buckwheat, wild cleavers cockle, cow fleabane, Canada <sup>3,4</sup> lady's-thumb lamb's-quarters <sup>1</sup> mustard, hare's-ear mustard, Indian mustard, tumble mustard, wild mustard, wormseed pigweed, green pigweed, redroot <sup>1</sup> pigweed, Russian ragweed, common <sup>1,4</sup> ragweed, false ragweed, giant <sup>4</sup> sow-thistle, perennial <sup>2</sup> spurry, corn smartweed, green thistle, Canada <sup>2</sup> velvetleaf waterhemp, common <sup>4</sup>	Corn: Surface pre-plant or pre- emergence and/or postemergence up to the 8-leaf growth stage  Weed stage: Pre-emergence to 2-leaf growth stage <sup>5</sup>	Note: The 1.25 L/ha rate of DIFLEXX is to be used only once in a growing season.  Sequential applications of the 600 mL/ha rate will help control late emerging weeds such as field bindweed, Canada thistle and velvetleaf. Sequential Applications must be separated by 2 weeks or more. Do not apply more than 1.25 L/ha of DIFLEXX per growing season.

- 1 Including atrazine-resistant species.
- 2 Apply DIFLEXX annually for three years at the flowering stage of bindweed and the budding stage of thistles.
- 3 Post-emergence application only.
- 4 Including glyphosate-resistant species; for control of glyphosate resistant weed species use the 1.25L/ha rate of DIFLEXX.
- For best performance, spray when the broadleaf weeds are emerged, actively growing and up to the 2-leaf stage of their development. Poor results may occur if weeds are

well advanced at the time of application.

## **DIFLEXX plus LIQUID NITROGEN**

Surface pre-plant and pre-emergent applications of DIFLEXX are generally compatible with most liquid nitrogen fertilizers. To determine compatibility, mix all components of the finished spray in proportionate quantities in a small jar before mixing in the spray tank. If the herbicides do not ball-up or form flakes, sludge, jelly, oily films or layers, or other precipitates within 5 minutes after mixing, the tested spray-mix is compatible. DO NOT use nitrogen solution (28-0-0) as the carrier for early postemergence applications as sprayable fluid fertilizer can typically cause corn injury such as tissue burn (necrosis).

## 8.3 TANK-MIXTURES

For control of weed species listed for DIFLEXX alone plus additional broadleaf weeds or grasses, DIFLEXX may be tank mixed with one of the following herbicide tank-mix product options. Consult the label of the tank mix partner(s) for further instructions regarding directions for use, rates, any additional weeds not specified on this label, limitations and further restrictions (especially re: soil type), and precautions. Follow the more stringent label precautionary and PPE measures for mixing/loading/applying, and label statements pertaining to environmental protection, such as buffer zones, stated on all tank-mix product labels.

#### Eastern and Western Canada

DIFLEXX can be tank-mixed at a rate of 0.6 L -1.25 L/ha with Liberty or glyphosate herbicides:

Tank Mix Product	Tank Mix Product Rate/ha	Corn Stage	Weeds controlled
Liberty 200SN Herbicide	2.5 L	NOTE: Use on LIBERTY LINK corn only Postemergence from Spike to 8-leaf growth stage.	Weeds controlled by DIFLEXX alone plus Liberty or glyphosate
Roundup Weathermax	1.67 L	Surface pre-plant or pre-	herbicides. Refer to
or Roundup Ultra 2	1.67 L	emergence and/or postemergence* up to the 8-leaf growth stage.	wood/rato
or Touchdown TOTAL	1.8 L		
or Glyfos Soluble Concentrate	2.5 L	* NOTE: Postemergence use on glyphosate tolerant	
or Vantage Plus or Vantage Plus Max	2.5 L 2.5 L	corn only	

## **Eastern Canada Only**

DIFLEXX can be tank-mixed at a rate of 0.6 L -1.25 L/ha with one of the following herbicide tank-mix product options:

Tank Mix Product	Tank Mix Product Rate/ha	Corn Stage	Weed Stage
Dual II Magnum	2.0 - 2.75 L	PRE to 2-leaf	Emergence to 2-leaf
Frontier Max Herbicide	756 – 963 mL	PRE to 3-leaf	Pre-emergence to 2-leaf <sup>2</sup>
Primextra II Magnum	3.0 - 4.0 L	PRE to 2-leaf	Emergence to 2-leaf
Aatrex Liquid 480¹	2.10 L	PRE to 5-leaf	Pre-emergence to 2-leaf
Aatrex Liquid 480¹ + Dual II Magnum	2.10 L + 2.0 L	PRE to 2-leaf	Emergence to 2-leaf

DIFLEXX can be tank-mixed at a rate of 0.6 L/ha with one of the following herbicide tank-mix product options:

Tank Mix Product	Tank Mix Product Rate/ha	Corn Stage	Weed Stage
Ultim 75% DF + non-ionic surfactant	1 bag + 0.2% v/v	Spike to 6-leaf	Emergence to 6-leaf
Elim EP Herbicide 25% DF + non-ionic surfactant	60 g + 0.2% v/v	Spike to 3-leaf	Emergence to 4-leaf
Elim EP Herbicide 25% DF + non-ionic surfactant	2.5L + 50 g + 0.2% v/v	Spike to 3-leaf	Emergence to 4-leaf

- 1 Other atrazine formulations will require a rate calculation adjustment according to percent active ingredient
- 2 For annuals, apply before the 2-leaf stage.

DIFLEXX can be tank mixed at 0.3 L/ha with Option 2.25 OD Liquid Herbicide and applied as a post-emergence application to field corn. Tank mixing DIFLEXX with Option 2.25 OD Liquid Herbicide will provide enhanced control of annual broadleaf weeds.

Option 2.25 OD Liquid Herbicide is to be used in conjunction with liquid nitrogen fertilizer (28% UAN) at a rate of 2.5 L/ha. Use of a spray-grade liquid nitrogen fertilizer is recommended.

Tank Mix	Tank Mix Product	Corn	Weed Stage
Product	Rate/ha	Stage	
Option 2.25 OD + liquid nitrogen fertilizer (28% UAN)	1.56 L + 2.5 L/ha	1 to 8-leaf	Consult the Option 2.25 OD label for the recommended leaf stage of weeds at application. For best results, apply to emerged, young, actively growing weeds.

#### **Weeds Controlled**

Perennials: quackgrass

**Annual Grasses:** foxtail, bristly foxtail, green foxtail, yellow grass, barnyard grass, large crab millet,

proso panicum, fall witchgrass

**Annual Broadleaf Weeds**: chickweed, common lamb's-quarters, mustard, wild mustard, wormseed, nightshade, Eastern black pigweed, redroot, ragweed, common (suppression only), velvetleaf.

## Western Canada (Prairie Provinces only)

DIFLEXX can be tank-mixed at a rate of 0.6 L/ha with one of the following herbicide tank-mix product options:

Tank Mix Product	Tank Mix	Corn	Weed	REMARKS
	Product	Stage	Stage	
	Rate/ha			
Accent 75DF	33 g (25 g ai/ha)	Spike to 6-leaf	Post-emergence to 6-leaf	Apply tank-mix in a single post-
+ non-ionic surfactant such as Agral®, Agsurf® or Citowett® Plus	+ 0.2% v/v			emergent spray; do not apply this tank mix within 30 days of harvest.

## Section 9: APPLICATION INSTRUCTIONS and USE LIMITATIONS

## 9.1 GENERAL REMINDERS FOR SUCCESSFUL OPERATION

- DO NOT APPLY BY AIR.
- DIFLEXX should not be applied on or near desirable trees or plants.
- Do not treat areas where movement of the chemical into the soil or surface washing may bring DIFLEXX into contact with roots of desirable plants.

- When applying DIFLEXX adjacent to sensitive crops, apply as a pre-emergent or early post-emergent treatment to avoid potential drift onto these sensitive crops.
- Crop damage can occur if the chemical is applied at any time other than the recommended crop stage.
- Apply DIFLEXX when air temperature is between 10 and 25°C. Do not apply when there is a risk of severe fall in night temperature after use.
- Do not contaminate domestic or irrigation water. Thoroughly clean application equipment.
- NOTE: Crops growing under stress from adverse environmental conditions such as
  excess moisture, drought, disease, etc., may suffer a further setback and exhibit
  more pronounced injury symptoms if DIFLEXX is applied. However, the crop injury
  that may occur is usually offset by the weed control obtained.

# 9.2 ADDITIONAL ENVIRONMENTAL PRECAUTIONS, SPRAY DRIFT MANAGEMENT AND BUFFER ZONES

#### ADDITIONAL ENVIRONMENTAL PRECAUTIONS

DO NOT apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuarine or marine habitats.

As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests.

DO NOT contaminate irrigation/drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

#### **Surface Runoff**

To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to, heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted, fine textured or low in organic matter such as clay).

Potential contamination of aquatic areas as a result of runoff may be reduced by including an untreated vegetative strip between the treated area and the edge of the water body.

Avoid applying this product when heavy rain is forecast.

## Leaching

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sand, loamy sand and sandy loam soils) and/or the depth to the water table is shallow.

#### **SPRAY DRIFT MANAGEMENT**

#### **Field Sprayer Application**

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. Boom height must be 60 cm or less above the crop or ground.

DIFLEXX may cause injury to desirable trees and plants, particularly non-dicamba tolerant soybeans, flowers, fruit trees, grapes, ornamentals, peas, potatoes, tomatoes, tobacco, and other broadleaf plants especially in their developmental and growing stage. Spray drift may result in injury to non-target crops or vegetation. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

Follow these precautions when spraying in the vicinity of sensitive crops:

Treat when wind is 3 to 15 km/hr. Do not apply during periods of dead calm or when weather conditions may cause drift from target areas to adjacent sensitive crops. Leave an adequate buffer zone between treatment areas and sensitive plants.

Use coarse sprays since they are less likely to drift than fine sprays. Select nozzles which minimize amounts of the fine spray particles. Keep the spray pressure below 150 kPa and the spray volume above 180 L/ha unless otherwise required by the nozzle manufacturer.

Do not spray when the temperature is expected to exceed 30°C.

Avoid spraying under conditions of high humidity or fog.

#### **BUFFER ZONES**

Use of the following spray methods or equipment DO NOT require a buffer zone: handheld or backpack sprayer, spot treatment and inter-row hooded sprayer.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, rangelands, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

Method of application	Crop	Buffer Zones (metres) Required for the Protection of:				
		Freshwater Habitat of Depths: Estuarine/Marine Habitats of Depths:				Terrestrial habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Field Corn	1	1	0	0	4

<sup>\*</sup> For field sprayer application, buffer zones can be reduced with the use of drift-reducing spray shields. When using a spray boom fitted with a full shield (shroud, curtain) that extends to the crop canopy, the labelled buffer zone can be reduced by 70%. When using a spray boom where individual nozzles are fitted with cone-shaped shields that are no more than 30 cm above the crop canopy, the labelled buffer zone can be reduced by 30%.

## SECTION 10: PRE-HARVEST, PRE-GRAZING/FEEDING AND RE-ENTRY INTERVALS

- Corn grain and stover may be harvested once the crop has reached the ensilage (milk) stage.
- DO NOT re-enter or allow worker entry to treated fields within 12 hours of application.
- If tank mixing, always respect the maximum intervals stated on the labels of all the tank mix products.
- Do not graze or feed the immature corn to livestock prior to 60 days of DIFLEXX application.
- Withdraw meat animals from treated field at least 3 days before slaughter.

## **SECTION 11: MIXING INSTRUCTIONS**

## **Order of Mixing**

DIFLEXX may be used with other pesticides, fertilizers, and micronutrients. The proper mixing procedure for DIFLEXX 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.
- 5. Add DIFLEXX 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.
  - Keep spray mixture in suspension at all times. If mixture is allowed to settle, thoroughly agitate the mixture before spraying.
  - Maintain constant agitation during application.

#### SECTION 12: SPRAYER CLEANUP

## **CLEANING SPRAY EQUIPMENT**

Ensure that spray equipment used to apply DIFLEXX is properly cleaned before re-using to apply any other chemicals. Severe crop injury may occur if any DIFLEXX remains in the spray equipment following application and is subsequently applied to sensitive crops. After using DIFLEXX, clean all mixing and spray equipment (including tanks, pumps, lines, filters, screens, and nozzles) with a strong detergent or commercial sprayer cleaner, using a triple rinse procedure:

- 1. After spraying, drain the sprayer (including boom). DO NOT allow the spray solution to remain in the spray boom lines overnight or for extended periods of time.
- 2. Flush tank, hoses, boom, and nozzles with clean water.
- 3. Inspect and clean all strainers, screens, and filters.
- 4. Prepare a cleaning solution with ammonia (1 L for every 100 L of water) or a commercial sprayer cleaner according to the manufacturer's directions.
- 5. Wash all parts of the tank, including the inside top surface. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
- 6. Flush hoses, spray lines, and nozzles with the cleaning solution for at least 1 minute.
- 7. Repeat above steps for two additional times to accomplish an effective triple rinse.
- 8. Remove nozzles, screens, and strainers, and clean separately in the cleaning solution after completing the above procedures.
- 9. Dispose of rinsate in compliance with the provincial regulatory agency guidelines.
- 10. Drain pump, filter, and lines.
- 11. Rinse the complete spraying system with clean water.

#### **SECTION 13: RESISTANCE MANAGEMENT RECOMMENDATIONS**

For resistance management, DIFLEXX is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to DIFLEXX and other Group 4 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

## To delay herbicide resistance:

- Where possible, rotate the use of DIFLEXX or other Group 4 herbicide within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that
  includes scouting, historical information related to herbicide use and crop rotation, and
  considers tillage (or other mechanical control methods), cultural (for example, higher
  crop seeding rates; precision fertilizer application method and timing to favour the
  crop and not the weeds), biological (weed-competitive crops or varieties) and other
  management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance contact Bayer CropScience Inc. via internet at www.cropscience.bayer.ca or telephone at 1-888-283-6847.

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