

## Destra<sup>™</sup> IS Herbicide

GROUP 2 HERBICIDE

GROUP 27 HERBICIDE

WETTABLE GRANULES

REGISTRATION NUMBER 32626 PEST CONTROL PRODUCTS ACT

FOR SALE FOR USE ON FIELD CORN IN EASTERN CANADA

COMMERCIAL (AGRICULTURAL)

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING KEEP OUT OF REACH OF CHILDREN

**ACTIVE INGREDIENT**: Rimsulfuron 5.45%

Mesotrione 36.36%

Warning, contains the allergens milk and sulfites

NET CONTENTS: 110 grams - 1000 kg

Corteva Agriscience Canada Company Suite 240, 115 Quarry Park Rd. SE Calgary, AB T2C 5G9 1-800-667-3852

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#### **PRECAUTIONS**

KEEP OUT OF REACH OF CHILDREN Do not contaminate any body of water. DO NOT apply by air.

- Wear chemical-resistant gloves, a long-sleeved shirt, long pants, plus socks and shoes during all
  activities. Wash the outside of the gloves before removing.
- Wash splashes from skin and eyes IMMEDIATELY with plenty of water.
- Gloves are not required during groundboom application.
- If ventilation is not adequate, wear an appropriate pesticide respirator. Avoid working in spray mist. Avoid all drift or contact with other vegetation.
- After spraying, wash hands and shower thoroughly with soap and water. While using product, do not
  eat, drink or smoke. Wash hands and exposed skin with soap and water thoroughly before eating,
  drinking, smoking, applying cosmetics or using the toilet.
- Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours after application.

DO NOT apply beyond the field boundary. Carefully observe sprayer cleanup instructions, as spray tank residue may damage crops other than corn.

#### **IMPORTANT**

Injury to or loss of desirable trees or vegetation may result from failure to observe the following: Do not apply or drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, tennis courts, or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water. Keep from contact with fertilizers, insecticides, fungicides and seeds.

## **FIRST AID**

**IF SWALLOWED**: Call a poison control centre 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 centre 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 poison control centre 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.

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

## **ENVIRONMENTAL PRECAUTIONS**

- TOXIC to small wild animals, aquatic organisms, and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.
- This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.
- To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.
- Avoid application when heavy rain is forecast.

 Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

## **TOXICOLOGICAL INFORMATION**: Treat symptomatically.

## **GENERAL INFORMATION**

Destra IS Herbicide is a wettable granule formulation to be mixed in water and applied post emergence from the 3 to 8 leaf stage of field corn in Eastern Canada. Destra IS Herbicide has burndown and soil residual activity and provides selective control or suppression of annual broadleaf weeds and annual grass weeds as well as quackgrass and volunteer canola in field corn. When applied postemergence, Destra IS Herbicide is absorbed through the leaves and is rapidly translocated to the plant's growing points.

#### **DIRECTIONS FOR USE**

- Make only one application per year to a maximum rate of 275 g/ha per season.
- Apply with ground equipment only.
- Apply only to agricultural crops when the potential for drift to areas of human habitation and areas of human activity (houses, cottages, schools, and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.
- 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 or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

## 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 S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.
- DO NOT apply by air.

#### **SPRAY BUFFER ZONES**

The spray 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.

Method of	Spray Buffer Zone	Buffer Zones (metres) Required for the Protection of:		
application	Terrestrial Aquatic habitats of water depths:		of water depths:	
	Habitat	Less than 1 m	Greater than 1 m	
Field sprayer	5	1	1	

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray 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.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

## **ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY**

 A rapid fluctuation in temperature (greater than 20°C difference within 24-36 hours) will stress the corn crop. For maximum crop safety, allow 24 hours for the corn to acclimatize before spraying Destra IS Herbicide as a postemergence application on emerged corn.

- For Destra IS Herbicide applied postemergence used alone or in a tank mix, apply ONLY when the temperature in the 24 hours before AND after application ranges between 5°C and 30°C. Temperatures beyond this range increase the potential for crop injury.
- WARNING: Crop injury including bleaching may result if application is made to corn that has been stressed by abnormally hot, humid or cold weather conditions, frost, low fertility, drought, water saturated soil, compacted soil, previous pesticide applications, disease or insect damage. If corn has been injured by frost, wait 48-72 hours before applying Destra IS Herbicide.
- Destra IS Herbicide rapidly stops growth of susceptible species; typical symptoms usually appear within 5-7 days, but may not be noticeable for 2-3 weeks after application, depending on growing conditions and weed susceptibility.
- Warm, moist conditions following application promote the activity of Destra IS Herbicide, while cool
  and/or dry conditions may reduce or delay activity. Weeds hardened off by cold weather or drought
  stress may not be controlled.

## DESTRA IS HERBICIDE ON FIELD CORN IN EASTERN CANADA ONLY

#### **SPRAY ADJUVANTS**

For postemergence applications, Destra IS Herbicide must be tank-mixed with a recommended non-ionic surfactant, either Citowett Plus, Agral 90 or Ag-Surf at 2 L per 1000 L spray solution (0.2% v/v). When Destra IS Herbicide is tank-mixed with a glyphosate herbicide, a non-ionic surfactant is not required.

# POSTEMERGENCE APPLICATION TO GLYPHOSATE TOLERANT OR CONVENTIONAL FIELD CORN

Apply Destra IS Herbicide at 275 grams/hectare as a broadcast spray, postemergence from the 3-8 leaf stage of corn.

Postemergence application of Destra IS Herbicide will control the following weeds:

275 grams/ha	LEAF STAGING AT APPLICATION	
Fall Panicum	1-4 leaves (up to early tillering)	
Green Foxtail	1-4 leaves (up to early tillering)	
Old Witch Grass	1-4 leaves (up to early tillering)	
Quackgrass†1	Apply to actively growing shoots in the 3 to 6	
	leaf (< 25 cm leaf extended) stage.	
Common Ragweed†	Up to 8 leaf	
Lambsquarters	Preemerge - 4 leaves (5-10 cm tall or across)	
Eastern Black Nightshade	Up to 8 leaf	
Volunteer Canola (excluding Clearfield)*2	Cotyledon – 5 leaves	
Redroot Pigweed (including triazine resistant)	Up to 8 leaf	
Velvetleaf	Up to 8 leaf	
Green Pigweed	Preemerge – 8 cm	

†Suppression only. Weed suppression is a visual reduction in weed competition (reduced population or vigour) as compared to an untreated area. Degree of suppression will vary with size of weed and environmental conditions prior to and following treatment.

For best results, apply Destra IS Herbicide IS to actively growing weeds. Weeds that emerge after application will be controlled after they absorb the herbicide from the soil provided there is sufficient moisture for uptake.

<sup>1</sup> Quackgrass - Apply Destra IS Herbicide with a recommended surfactant postemergent when the majority of the quackgrass shoots are actively growing and in the 3 to 6 leaf stage (< 25 cm - leaf extended). Application to quackgrass prior to the 3 to 6 leaf stage may result in reduced weed control since the majority of shoots may not have emerged.

<sup>2</sup> For control of volunteer canola, including glyphosate tolerant varieties, apply Destra IS Herbicide as a broadcast spray, with a recommended surfactant, when the volunteer canola is between the cotyledon and 5-leaf stage.

#### **GLYPHOSATE TOLERANT CORN**

Destra IS Herbicide can be tank-mixed with glyphosate at 900 g ai/ha and AAtrex Liquid 480 at 0.58 L/ha for control of additional weeds.

#### **CONVENTIONAL CORN**

Destra IS Herbicide can be tank-mixed with AAtrex Liquid 480 at 0.58 L/ha and a non-ionic surfactant at 2 L/1000 L (0.2% v/v) for control of additional weeds.

#### MIXING INSTRUCTIONS

- 1. Fill clean tank about 1/3 full with fresh water.
- 2. Turn on full agitation.
- 3. With the agitator running, add the required amount of Destra IS Herbicide. Continue to agitate for a minimum of 5 minutes to ensure that Destra IS Herbicide is **completely** dispersed.
- 4. Once granules are dispersed continue to fill the tank to 2/3 to 3/4 full, then add the required amount of the tank mix partner.
- 5. After Destra IS Herbicide has been well mixed and is in suspension, add a recommended non-ionic surfactant such as Citowett Plus, Agral 90, or Ag-Surf at 2 L per 1000 L spray solution (0.2 % v/v), unless tank mixing with glyphosate, then no adjuvant is required.
- 6. Fill the remainder of the spray tank.
- 7. For repeat tank loads, reduce the material remaining in the tank to 10% of the original volume **or less** before proceeding with step 1, because remaining chemicals may prevent Destra IS Herbicide granules from completely dissolving. If this is not possible, pre-slurry Destra IS Herbicide in a small amount (5-10 L) of water before adding to the tank.

Agitation is required for uniform mixing and application. The optimum water volume for Destra IS Herbicide application is 140 - 200 litres of water per hectare (minimum of 100 litres of water per hectare). Use a spray pressure of 175 - 275 kPa. Flat fan nozzles are recommended. Use 50 mesh filter screens or larger. Use spray preparation of Destra IS Herbicide within 24 hours or product degradation may occur resulting in a loss of weed control. Use vigorous agitation to thoroughly disperse spray mixtures that have been allowed to stand in the tank.

NOTE: Destra IS Herbicide will degrade in acidic or highly alkaline water. Mix no more than can be used in one day. If spraying is interrupted, thoroughly re-agitate the spray mixture before resuming spraying.

#### **Tank Mixtures**

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Corteva Agriscience Canada Company at 1-800-667-3852 or <a href="https://www.corteva.ca">www.corteva.ca</a> for information before applying any tank mix that is not specifically recommended on this label.

#### SPRAYER CLEANUP

To avoid subsequent injury to desirable crops, thoroughly clean all mixing and spray equipment immediately following applications of Destra IS Herbicide as follows:

- 1. Drain tank and flush tank, boom and hoses with clean water. If boom is equipped with multiple nozzle bodies, be sure to rotate through all nozzles to ensure clean water reaches all parts of these assemblies.
- 2. Visually inspect tank to ensure removal of all visible herbicide residues. If necessary, repeat Step 1.
- 3. Fill the tank with clean water, and then add 1 litre household AMMONIA (containing minimum of 3% ammonia) or equivalent amount of a sprayer tank cleaner containing ammonia, per 100 litres of water. Ammonia will not neutralize the herbicide, but helps dissolve dried on herbicide deposits. If an emulsifiable concentrate has been tank mixed with Destra IS Herbicide, use of a wetting agent in the cleaning process will assist in removing oily residue that may trap Destra IS Herbicide on the tank and hoses.
- 4. Flush solution through boom and hoses, and then add more water to completely fill tank. Allow to sit for 15 minutes with agitation.
- 5. Drain the tank.
- 6. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
- 7. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the hoses and boom.
- 8. Prior to using the sprayer for the next application, flush the tank, boom, and hoses for 5 minutes with fresh water.

CAUTION:

DO NOT mix ammonia with chlorine bleach. Using ammonia with chlorine bleach will release a gas with a musty chlorine odour which may cause eye, nose, throat and lung irritation. DO NOT clean equipment in an enclosed area. DO NOT clean the sprayer near desirable vegetation, wells or other water sources.

#### **USE OF INSECTICIDES**

For maximum crop safety, Destra IS Herbicide should be applied only to corn which has NOT been treated with a highly systemic organophosphorus soil insecticide or carbamate insecticide.

DO NOT tank mix Destra IS Herbicide with any organophosphorus insecticide. DO NOT apply a foliar organophosphorus insecticide within 7 days before or after applying Destra IS Herbicide.

#### REPLANTING TO OTHER CROPS

Destra IS Herbicide is degraded by natural soil processes however, certain crops have been shown to be sensitive to low residues of Destra IS Herbicide. Field tests have shown that the following crops may safely be planted at the prescribed interval following corn that has been treated with Destra IS Herbicide.

CROP	REPLANTING INTERVAL
Winter Wheat	4 months
Field Corn	10 months
Soybeans, white beans	11 months
Potatoes	11 months

For other crops, a field bioassay is recommended before planting. A successful field bioassay means growing to maturity a test strip of the crop(s) intended for production the following year.

#### **FIELD BIOASSAY**

Select a representative area or areas of the field previously treated with Destra IS Herbicide to plant your bioassay crop(s). Be sure to consider factors such as size of field, soil texture, drainage and turn-around areas when selecting the site(s) that are most representative of the soil conditions in the field. On large fields, more than one site may be needed in order to obtain reliable results.

Plant the test strips perpendicular to the direction in which the field was sprayed. The strips should be long enough to cross the width of several spray swaths. Large test strip areas are more reliable than small ones.

Use standard tillage and seeding equipment to plant the bioassay. Prepare a seed bed and plant the crops and varieties you want the option of growing the following year. It is important to use the same planting time, conditions, techniques and cultural practices you normally use to plant and grow the bioassay crop(s). Also plant into an adjacent area not treated with Destra IS Herbicide to use as a comparison.

As the crop(s) emerges and grows, examine these key points in Destra IS Herbicide treated and non-treated areas:

crop stand root development rate of growth

plant colour and vigour yield

Allow the bioassay crop(s) to grow to maturity while making your observations. Do not overspray the test strips with herbicides that may damage the bioassay crop(s). If the bioassay indicates that Destra IS Herbicide residues are still present, continue cropping only to those crops listed on the label and do not rotate to other crops until bioassay results indicate that susceptible crops are growing normally.

#### **USE PRECAUTIONS**

Do not apply Destra IS Herbicide during periods of intense rainfall or to soils saturated with water. Do not apply directly to standing or running water. Do not apply in areas where surface water from the treatment site can run off to adjacent cropland, either planted or to be planted, or into streams, irrigation water or wells. Applications should only be made when there is no hazard of spray drift contaminating non-target land areas since very small quantities of the Destra IS Herbicide spray solution may severely injure susceptible crops during both growing and dormant periods.

As with any herbicide, overlaps or starting, stopping, slowing and turning while spraying may result in crop injury.

Crop injury may result if application is made to corn that has been stressed by abnormally hot, humid or cold weather conditions, frost, low fertility, drought, water saturated soil, compacted soil, previous pesticide applications, disease or insect damage. Temporary crop injury may occur. The symptoms are most visible where excessive rates have been applied, such as sprayer overlaps. Corn quickly outgrows these effects and continues to grow normally.

Do not apply to soils that contain less than 1% or more than 10% organic matter.

Under extreme weather conditions, such as hot, dry weather, excessive moisture, or frost, weed control may be reduced. Optimum control of emerged weeds will be obtained when weeds are actively growing.

Dry conditions following application may reduce the soil residual activity of Destra IS Herbicide. If an activating rain (12 mm) is not received within 7-10 days after application, cultivation is suggested to activate the herbicide.

Severe injury and crop yield loss may occur if Destra IS Herbicide is applied to crops that are treated with a highly systemic organophosphorus soil insecticide or carbamate insecticide.

Do not cultivate corn within 7 days before or after a postemergence application of Destra IS Herbicide.

Rainfall within 2 to 4 hours after postemergence applications of Destra IS Herbicide may reduce weed control.

Destra IS Herbicide must not be applied within 100 days of harvest.

Make only one application of Destra IS Herbicide per year.

Do not apply Destra IS Herbicide within 30 days of corn harvest (silage, fodder or grain)

Do not graze of feed treated corn forage, silage, fodder or grain for at least 30 days after an application of Destra IS Herbicide.

#### RESISTANCE-MANAGEMENT RECOMMENDATIONS:

For resistance management, please note that Destra IS Herbicide is both a Group 2 and Group 27 herbicide. Any weed population may contain or develop plants naturally resistant to Destra IS Herbicide and other Group 2 or Group 27 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 Destra IS Herbicide or other Group 2 or Group 27 herbicides 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 treated 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 resistancemanagement and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact your local Corteva Agriscience Canada Company representative or the Corteva Agriscience Canada Company hotline at 1-800-667-3852.

#### **STORAGE**

Store this product away from food or feed. Store product in original container only, away from other pesticides and fertilizer. Not for use or storage in or around the home. Keep container closed. Keep product container away from moisture. DO NOT use or store product near heat or open flame.

## **DISPOSAL**

#### **Disposal of 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/territorial requirements.

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

#### **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. The user assumes the risk to persons or property that arises from any such use of this product.

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Label Code: CN-32626-004-E Replaces: CN-32626-003-E

Specimen Label Notes

Updated tank mix general statement and address