



ENLIST™ WEED CONTROL SYSTEM
2019 PRODUCT USE GUIDE

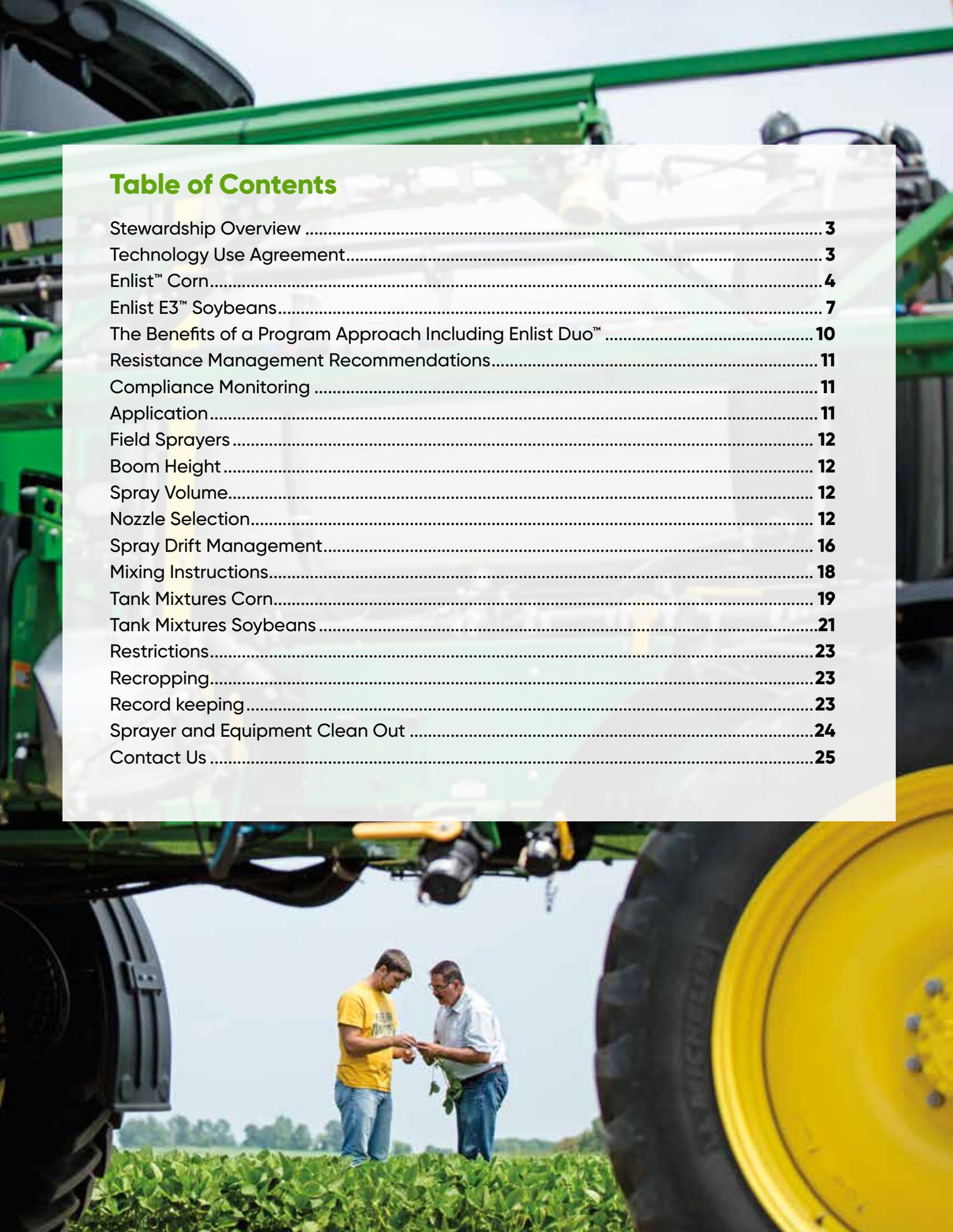
Enlist Duo™ herbicide,
used with Enlist™ corn and Enlist E3™ soybeans



CANADIAN EDITION

Table of Contents

Stewardship Overview	3
Technology Use Agreement.....	3
Enlist™ Corn.....	4
Enlist E3™ Soybeans.....	7
The Benefits of a Program Approach Including Enlist Duo™	10
Resistance Management Recommendations.....	11
Compliance Monitoring	11
Application.....	11
Field Sprayers	12
Boom Height.....	12
Spray Volume.....	12
Nozzle Selection.....	12
Spray Drift Management.....	16
Mixing Instructions.....	18
Tank Mixtures Corn.....	19
Tank Mixtures Soybeans	21
Restrictions.....	23
Recropping.....	23
Record keeping.....	23
Sprayer and Equipment Clean Out	24
Contact Us	25



Stewardship Overview

Responsible use and stewardship of the Enlist™ corn, Enlist E3™ soybeans, and Enlist Duo™ herbicide are essential to ensuring that these tools are effective and perform for years to come on your farm.

This Product Use Guide (Guide) details the requirements and recommendations for the planting of Enlist™ corn, Enlist E3™ soybeans and the proper use of Enlist Duo™ Herbicide featuring Colex-D™ technology. This Guide is not a pesticide product label. It is intended to provide additional information and to highlight approved uses from specific product labels.

Read and follow all precautions and directions on the product label for Enlist Duo™ herbicide used on Enlist crops, as well as any other pesticide products applied to the Enlist crops. As a grower planting Enlist™ corn or Enlist E3™ soybeans, you must be both familiar with and follow the Technology Use Agreement (Agreement) and this associated Guide.

Technology Use Agreement

You must have a valid, executed Corteva Agriscience™ Technology Use Agreement to legally obtain, plant, and grow hybrids and varieties that contain the Enlist trait.

Failure to comply with the terms of the Agreement or this Guide can result in your losing the privilege to grow seed containing the Enlist technology. You must communicate all applicable terms, conditions and restrictions on your Enlist™ corn and Enlist E3™ soybeans to all persons and entities possessing or taking an interest in your Enlist™ crop and/or the grain therefrom. You may complete the Agreement online at: www.traitstewardship.corteva.ca/, or obtain a copy by calling the Solutions Center at **1-800-667-3852** or by contacting your Seed Provider.

By signing the Agreement, you receive a limited, non-transferable, revocable, non-exclusive license under the Licensed Rights to purchase Seed from Seed Seller and to plant Purchased Seed to produce a single commercial crop in Canada. In addition, when you purchase Seed and plant Purchased Seed containing Enlist Technology, you shall receive a limited license to apply Enlist™ Herbicide Products in Enlist crops grown from such Purchased Seed. Any modifications to the Licensed Rights will be set forth in an Annual Technology Notification.

By signing the Agreement, you will also receive an annual, updated Product Use Guide and other important updates relating to Enlist™ corn, Enlist E3™ soybeans, Enlist Duo™ herbicide, and corn insect protection traits.

By purchasing and using technologies and traits under the Agreement, you reaffirm your commitment to the Agreement you signed, and to follow applicable Guide(s) and herbicide product labels. The seed you purchase is for your use and cannot be given, sold or otherwise transferred to others.

Always consult your trait provider's technical guides before planting. ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Please direct questions about this Guide or seed that contains Corteva Agriscience technologies and traits to your seed provider or to the Solutions Center at 1-800-667-3852.



Enlist™ Corn

The Enlist™ corn trait confers tolerance to 2,4-dichlorophenoxyacetic acid “2,4-D” and aryloxyphenoxy propionate “-fop” herbicides, and is stacked with a glyphosate tolerance trait in Enlist™ corn hybrids. This provides the benefits of tolerance to in-crop applications of Enlist Duo™ herbicide to reduce weed competition. Enlist Duo™ herbicide and the use of other herbicides registered for corn provide alternate modes of action to manage hard-to-control and resistant weeds as part of the management practices for Enlist™ corn.

In addition to herbicide tolerance, some Enlist hybrids will contain *Bt* traits that confer insect protection. If you purchase hybrids that contain *Bt* traits, you must also follow applicable Insect Resistance Management requirements. Consult the Corn Product Use Guide for refuge requirements.

HERBICIDE TOLERANCE OF ENLIST™ CORN HYBRIDS			
	SMARTSTAX™ ENLIST™	POWERCORE™ ENLIST™	ENLIST™ ROUNDUP READY®2
2,4-D CHOLINE	Tolerant	Tolerant	Tolerant
GLYPHOSATE	Tolerant	Tolerant	Tolerant
“-fop” HERBICIDES	Tolerant	Tolerant	Tolerant
GLUFOSINATE	Tolerant	Tolerant	Not tolerant
CYCLOHEXANEDIONE (“-dim”) HERBICIDES	Not tolerant	Not tolerant	Not tolerant

Volunteer corn control

Enlist™ corn is tolerant to 2,4-D choline, glyphosate and “-fop” herbicides, such as Assure® II (quazalofop). It is recommended that to control volunteer Enlist™ corn in soybeans, a cyclohexanedione “-dim” herbicide must be used (e.g., Select®, Statue® or Arrow All-in® (clethodim) or Poast Ultra® (sethoxydim).

Coexistence

Corn is a naturally cross-pollinated crop, and a small amount of corn pollen movement to nearby fields is not uncommon. You can take steps to reduce undesired pollen movement, including:

- Maintaining a non-corn buffer between corn fields containing biotechnology traits and conventional corn fields
- Not growing corn with biotechnology traits upwind (based on the prevailing wind directions) of other corn fields
- Discussing your cropping plans with your neighbours in advance

Crop and grain marketing stewardship

Corteva Agriscience™ is a member of Excellence Through Stewardship® (ETS). Products are commercialized in accordance with ETS product launch stewardship guidance and Corteva Agriscience's Product Launch Stewardship Policy.

Grain produced from these crops should be shipped to appropriate markets as necessary. Any crop or material produced from these products can only be exported to, used in, processed in, or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotechnology traits across boundaries into nations where import is not permitted. Talk to your grain handler or product purchaser to confirm their buying position for this product.

For further information about your crop marketing options, contact us at **877-4-TRAITS (877-487-2487)**. Information regarding the regulatory and market status of agricultural biotechnology products can be found at: www.biotradestatus.com.

Authorized herbicides with Enlist™ corn

Enlist™ corn contains the patented gene that provides tolerance to 2,4-D and "-fop" herbicides. The Enlist trait is also stacked with the glyphosate trait in Enlist™ corn hybrids.

Following burndown, Enlist Duo™ with Colex-D™ technology is the only herbicide containing 2,4-D that is labeled for pre-emergence and post-emergence use with Enlist™ corn. Assure® II herbicide (quizalofop) is the only fop herbicide expressly labeled for pre-emergence and post-emergence use with Enlist™ corn.

Growers are NOT authorized to:

- Use 2,4-D products without Colex-D™ Technology in conjunction with Enlist crops
- Following burndown, use any phenoxy auxin herbicide-containing product (e.g., containing 2,4-D, 2,4-DB, MCPA, dichlorprop, LV6, MCPB, mecoprop) which is NOT expressly labeled for use in conjunction with Enlist crops, including pre-emergent use
- Following burndown, use any AOPP herbicides (e.g., quizalofop, cyhalofop, haloxyfop, diclofop, fenoxaprop, fluazifop) not expressly labeled for Enlist™ corn on emerged Enlist™ corn
- Following burndown, use any pyridine auxin herbicides (e.g., triclopyr, fluroxypyr) on emerged Enlist Crops





Enlist E3™ Soybeans

Enlist E3™ soybeans offer robust tolerance to 2,4-D choline, glufosinate and glyphosate.

This allows farmers to use multiple modes of actions to obtain effective weed control while minimizing the potential for the development of resistant weeds.

Enlist E3™ soybeans provide the benefits of tolerance to in-crop applications of Enlist Duo™ herbicide and other herbicide products to reduce weed competition. Enlist E3™ soybeans allow growers to use alternate modes of action to manage hard-to-control and resistant weeds as part of the management practices for Enlist E3™ soybeans.

	ENLIST E3™
2,4-D CHOLINE	Tolerant
GLUFOSINATE	Tolerant
GLYPHOSATE	Tolerant

Coexistence

Soybeans are a naturally self-pollinated crop with very low risk of mixing by cross-pollination. If you wish to use or market Enlist E3™ soybeans separately from general commodity use or identity preserved soybeans, fields should be planted far enough away from other crops to prevent mechanical mixture during harvest.

Crop and grain marketing stewardship

Corteva Agriscience™ is a member of Excellence Through Stewardship® (ETS). Products are commercialized in accordance with ETS product launch stewardship guidance and Corteva Agriscience's Product Launch Stewardship Policy.

Direct grain produced from these crops to appropriate markets as necessary. Any crop or material produced from these products can only be exported to, or used in, processed in, or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotechnology traits across boundaries into nations where import is not permitted. Talk to your grain handler or product purchaser to confirm their buying position for this product.

Seed Coat Colour Variation in Enlist E3™ Soybeans

In addition to ease of use, exceptional weed control and high yield potential with Enlist E3™ soybeans, farmers may occasionally see a seed coat colour variation. This colour variation in Enlist E3™ soybeans is from naturally occurring substances found in soybeans. It typically appears as a light brown band connecting ends of the hilum and/or light brown shadows on each side of the hilum. It can range from very slight to a darker tint and varies in frequency, geography, growing season (year-to-year) and position on the plant or within pods. The seed coat colour variation is not due to application of herbicides.

Based on our years of study and experience, we're confident in the performance and grain quality of Enlist E3™ soybeans.

To learn more about seed coat colour variation, call the Solutions Center at 1-800-667-3852 or your local Territory Manager.

For further information about your crop marketing options, contact us at **877-4-Traits (877-487-2487)**. Information regarding the regulatory and market status of agricultural biotechnology products can be found at: www.biotradestatus.com.

Authorized herbicides with Enlist E3™ soybeans

Enlist E3™ soybeans contain the patented gene that provides tolerance to 2,4-D choline, glyphosate and glufosinate herbicides.

Following burndown, Enlist Duo™ with Colex-D™ technology is the only herbicide containing 2,4-D that is labeled for pre-emergence and post-emergence use with Enlist E3™ soybeans.

Growers are NOT authorized to:

- Use 2,4-D products without Colex-D™ Technology in conjunction with Enlist™ crops
- Following burndown, use any phenoxy auxin herbicide-containing product (e.g., containing 2,4-D, 2,4-DB, MCPA, dichlorprop, LV6, MCPB, mecoprop) which is NOT expressly labeled for use in conjunction with Enlist crops, including pre-emergent use
- Following burndown, use any pyridine auxin herbicides (e.g., triclopyr, fluroxypyr) on emerged Enlist™ Crops

Enlist Duo™ Herbicide with Colex-D™ technology

CROP	ENLIST™ CORN AND ENLIST E3™ SOYBEANS
Active Ingredients	2,4-D Choline and Glyphosate DMA
Modes of Action	Group 4 and Group 9
Formulation	Liquid
Signal Word	Warning
Use Rate In-Season	Application use rate range of: 2.9 to 4.3 L/ha (1.17 - 1.74 L/ac)
Surfactants/Oils	Not Recommended
Application Timing	Post-emergence to weeds
Droplet Size	Coarse to extremely coarse spray
Spray Volume	Apply 50 to 200 L of spray solution per hectare (5 - 20 gpa) Recommend 100 - 150 L/ha (10 - 15 gpa) to ensure thorough coverage

*Read the Product Label for complete details.

Weed control with Enlist Duo™ herbicide

Enlist Duo™ herbicide with Colex-D™ technology combines the proven performance of 2,4-D choline and glyphosate in a convenient, proprietary blend. Following burndown, Enlist Duo™ with Colex-D technology is the only herbicide containing 2,4-D that is labeled for pre-emergence and post-emergence use with Enlist™ crops. Use of Enlist Duo™ over a crop that does not contain the Enlist™ tolerance traits for the herbicides will cause crop damage. Verify the weed control system in your field before making over-the-top herbicide applications. Always read and follow label directions.

Rates of application

Use 2.9 – 4.3 L/ha (1.2 L/ac to 1.74 L/ac) depending on the weeds present. Apply Enlist Duo™ herbicide when weeds are young and actively growing, per the label directions. The lower use rates will effectively control young, succulent growth of sensitive weed species. For less sensitive weed species, weeds at an advanced growth stage, or under conditions where control is more difficult, the higher use rate is required. It is recommended that for the widest spectrum of weed control the 4.3 L/ha (1.74 L/ac) rate should be applied.



The product label for Enlist Duo™ herbicide contains the directions and recommendations for use over Enlist™ crops, such as:

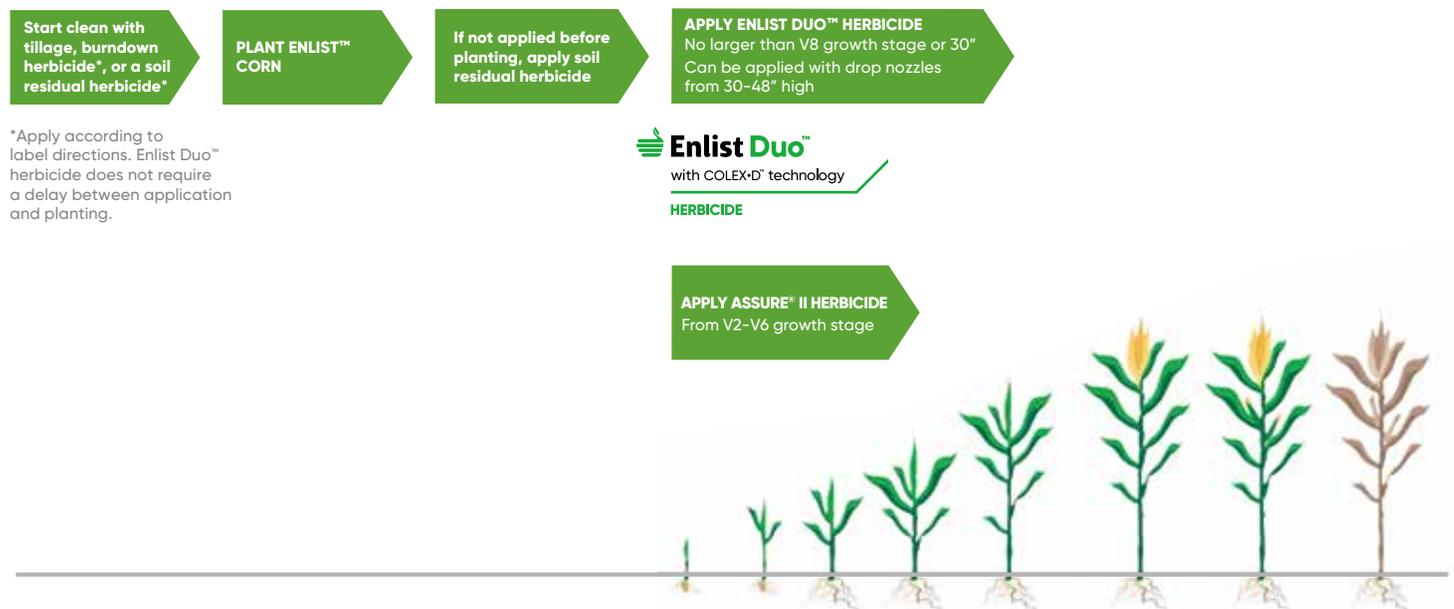
- Application equipment requirements
- Product use directions
- Restrictions and precautions
- Weed management information and other product information

The program approach

It is recommended that Enlist Duo™ herbicide be used as part of a program approach to control weeds. This helps improve weed control, reduce weed competition during key stages of crop growth, and manage herbicide resistance. The Weed Science Society of America classifies 2,4-D as a Group 4 growth regulator herbicide (synthetic auxin) and glyphosate as a Group 9 herbicide (inhibitor of ESPP synthase).

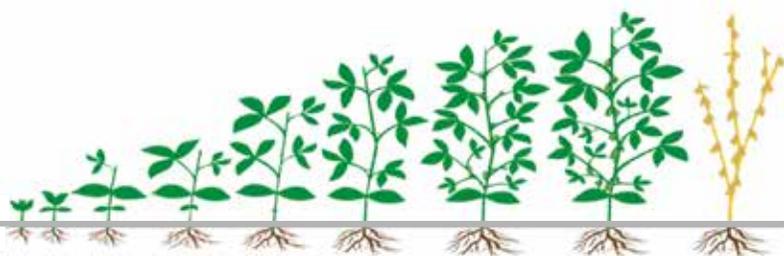
Corn

The recommended weed control program for Enlist™ corn is a pre-emergence herbicide product containing at least two non-Group 4/Group 9 modes of action, followed by a post-emergence application of Enlist Duo™ herbicide. If a second post application of Enlist Duo™ herbicide is needed, it must be made at least 12 days after the first application, per the product label.



Soybeans

The recommended weed control program for Enlist E3™ soybeans is a pre-emergence herbicide product containing at least two non-Group 4/Group 9 modes of action, followed by a post-emergence application of Enlist Duo™ herbicide. If a second post application of Enlist Duo™ herbicide is needed, it must be made at least 12 days after the first application, per the product label. Glufosinate, a group 10 herbicide, provides an additional mode of action that can be utilized in a program approach.



The Benefits of a Program Approach Including Enlist Duo™:

- Eliminates competition from a broad spectrum of early-season grass and broadleaf weeds
- Multiple modes of action for resistance management
- Timely post-emergent herbicide applications for optimum weed control and reduced weed competition when the crop is vulnerable
- Application windows the same as glyphosate in glyphosate cropping system

Resistance Management Recommendations

Repeatedly using herbicides with the same mode of action can lead to selection for resistant biotypes within the larger population of weeds. The key to controlling existing resistant weeds and slowing the development of new resistant weeds is to diversify and reduce selection pressure on the weed population – while maintaining high levels of weed control that limit weed seed production.

You can diversify your weed management strategies by integrating proven practices for weed control, such as:

- Rotate crops and cultural practices to allow for a wider range of weed control practices.
- Start with a clean field, using either a burn-down herbicide application or tillage and scout fields before and after herbicide application.
- Use the correct herbicide product at the right rate and time and apply herbicide mixtures with different modes of action.
- Control weeds early when they are relatively small. Rotate herbicides that have different modes of action and use residual herbicides that have different modes of action.
- Use new commercial, weed-free crop seed and clean equipment before moving from field to field to minimize spread of weed seed.
- Control weed escapes and prevent weeds from setting seeds. Incorporate other herbicides and cultural practices as part of the herbicide-tolerant cropping systems where appropriate.

Compliance Monitoring

Corteva Agriscience™ will monitor compliance with the Technology Use Agreement and Product Use Guide(s) through surveys and on-farm assessments. You may receive a request to provide information about the location of fields planted with Enlist™ crops and the herbicides applied to these fields. Failure to follow these stewardship requirements will result in action by Corteva Agriscience™, which may include additional education and training, monitoring, and/or loss of access to the technology.

Application

Read and follow product label, as well as follow provincial and local requirements related to application of pesticides. Apply Enlist Duo™ herbicide only with properly calibrated ground application equipment using appropriate carriers.

Resources

- Enlist website: www.EnlistCanada.ca
- www.corteva.ca
- Solutions Center
 - solutions@corteva.com
 - Phone: 1-800-667-3852
- Trait and Regulatory and market Status: www.biotradestatus.com
- Trait Stewardship: www.TraitStewardship.Corteva.ca
- Canadian Weed Science Society: <https://weedscience.ca/>
- Weed Science Society of America: www.wssa.net/
- Herbicide Resistance Action Committee: www.hracglobal.com/

Field Sprayers

As per the label, a boom type field sprayer is required to make a herbicide application of Enlist Duo™ herbicide. An accurate and effective herbicide application can be made with a field sprayer when:

1. A **uniform** pressure is delivered across the whole boom
2. All nozzles have the **same output and a good spray pattern**
3. A **consistent and appropriate** forward **speed** is maintained in actual field conditions
4. The boom height can be adjusted to the required nozzle-to-target height, and maintained during actual field conditions to ensure proper overlap of the nozzle-tip patterns

Boom Height

To minimize spray drift potential, use the optimum nozzle height recommended by the nozzle manufacturer based on configuration of the spray boom and spray angle of the nozzle tip, provided boom height is 60 cm or less above the crop or ground.

Spray Volume

Use a spray volume of 20 L/ac to 80 L/ac or 5 GPA to 20 GPA for ground equipment and apply with calibrated spray equipment. Corteva Agriscience™ recommends 100 – 150 L/ha (10 – 15 GPA) to ensure thorough coverage. Spray at low pressures (200 to 275 Kpa) (30 to 40 Psi) when the weeds are actively growing.

In general, increase spray volume as crop canopy, height and weed density increase to obtain adequate spray coverage.

Nozzle Selection

Proper spray nozzle selection plays an important role in minimizing the potential for physical drift. When selecting a nozzle many variables need to be considered, such as; pressure, water volume, speed and nozzle spacing on the boom. The droplet size from a nozzle becomes very important when the efficacy of a particular crop protection chemical is dependent on coverage, or the prevention of spray leaving the target area is a priority.

The majority of the nozzles used in agriculture can be classified as producing droplets in the range of extremely fine to ultra coarse droplets, as defined by the American Society of Agriculture Engineers (ASAE). Nozzles that produce droplets in the finer to middle portion of the range generally produce good coverage, but are more prone to drift off target. Nozzles producing droplets from the middle to coarser end of the range can still provide thorough surface coverage and provide significantly improved drift control. The following classification system is used to define nozzle output (Table 1).

Helpful Links:

- Tee Jet Technologies: www.teejet.com
- Pentair: www.hypropumps.com
- Greenleaf Technologies: www.turbodrop.com
- Hardi International: www.hardi-international.com
- Wilger: www.wilger.net/
- www.sprayers101.com

Droplet Size Distribution Classification

Table 1

* To measure the range of droplets produced by a nozzle, the term volume median diameter, or VMD, is used. The VMD represents the droplet size where half of the spray volume is contained in droplets larger than the VMD, and half of the volume is in droplets smaller than the VMD.



Source: The American Society of Agricultural Engineers

CATEGORY	SYMBOL	COLOUR CODE	APPROXIMATE DVO.5 (VMD)(MICRONS)
Extremely Fine	XF	Purple	~50
Very Fine	VF	Red	<136
Fine	F	Orange	136-177
Medium	M	Yellow	177-218
Coarse	C	Blue	218-349
Very Coarse	VC	Green	349-428
Extremely Coarse	XC	White	428-622
Ultra Course	UC	Black	>622

Nozzle manufacturers use this standardized system to indicate the droplet size of their nozzles for different size and pressure combinations. Many pesticide product labels, including Enlist Duo™ herbicide, recommend appropriate droplet sizes to be used with products. For example, the label for Enlist Duo™ herbicide recommends using a nozzle producing **Coarse** to **Extremely Coarse** sized droplets. From the nozzle manufacturer charts (Table 2 and Table 3), a number of different options are available to provide the nozzle and pressure combination that result in a spray droplet with a size of **Coarse**, **(blue) Very Coarse (green)** or **Extremely Coarse (white)** classification. This system allows the use of many different combinations of nozzles and pressure settings, to achieve the desired droplet size, reduce drift, and provide adequate coverage required for control of the pest.

Table 2

	PSI										
	15	20	25	30	35	40	50	60	70	80	90
AIXR110015	XC	XC	VC	C	C	C	C	M	M	M	M
AIXR11002	XC	XC	XC	VC	VC	C	C	C	C	M	M
AIXR110025	XC	XC	XC	XC	VC	VC	C	C	C	C	C
AIXR11003	XC	XC	XC	XC	VC	VC	C	C	C	C	C
AIXR11004	UC	XC	XC	XC	XC	XC	VC	VC	C	C	C
AIXR11005	UC	XC	XC	XC	XC	XC	VC	VC	C	C	C
AIXR11006	UC	XC	XC	XC	XC	XC	VC	VC	VC	C	C

Source: Table 2 - TeeJet Technologies

Table 3

	15 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	70 PSI	80 PSI	90 PSI	100 PSI	115 PSI
ULD120-015	VC	C	C	C	C	M	M	M	M	F	F
ULD120-02	VC	VC	C	C	C	C	M	M	M	M	F
ULD120-025	VC	VC	C	C	C	C	M	M	M	M	M
ULD120-03	VC	VC	VC	C	C	C	C	M	M	M	M
ULD120-04	VC	VC	VC	C	C	C	C	M	M	M	M
ULD120-05	XC	XC	VC	VC	VC	C	C	C	C	M	M
ULD120-06	XC	XC	XC	VC	VC	VC	C	C	C	C	M
ULD120-08	XC	XC	XC	VC	VC	VC	C	C	C	C	M

Source: Table 3 Source SpraySmarter.com

An important point to remember when choosing a spray nozzle that produces a droplet size in one of the eight categories is that one nozzle can produce different droplet size classifications at different pressures. A nozzle might produce medium droplets at low pressures, while producing fine droplets as pressure is increased.

Nozzle selection is the most important factor in reducing pesticide drift. Take time to match application needs to the nozzle best suited to the situation. Most nozzles can be used under different conditions to reduce drift. They also can be used improperly. Be sure to pay attention to pressure, product, water volumes and pest before you spray. Enlist Duo™ herbicide applications require a **Coarse** to **Extremely Coarse** spray droplet. Ultra coarse droplet sizes may result in decreased weed control and increased crop injury. Ensure that the nozzle you have selected is capable of delivering the required droplet size at the determined pressure and spray volume combination. For further guidance on selecting the correct nozzle check with your sprayer manufacture/dealer.







Spray Drift Management

Wind

DO NOT apply during periods of dead calm. Avoid applications of Enlist Duo™ herbicide when winds are gusty. Drift potential is lowest at wind speeds less than 16 km/h. Target applications at wind speeds greater than 3 km/h but less than 16 km/h. Do not apply at wind speeds greater than 16 km/h.

Local terrain can influence wind patterns. The applicator should be familiar with local wind patterns and how they affect drift.

Temperature and humidity

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

Check for a temperature inversion before every application

A temperature inversion occurs when a layer of warm air covers a layer of cooler air and acts like a lid, preventing the cooler air from rising and dissipating into the upper atmosphere. During a temperature inversion, spray particles can become trapped in the warmer layer of air and stay suspended until wind movement increases, resulting in off-target movement. Never spray if you suspect a temperature inversion. You run the risk of damaging susceptible plants in nearby fields, lawns and gardens. Wait until later in the day and check again for a more favourable application environment.



Before every herbicide application, use steps like these to make sure a temperature inversion is not occurring:

- Monitor temperatures using weather apps for your smart phone when planning an application, and always check conditions in the field. If temperature is within 3 degrees Celsius of the overnight low, closely check wind speed and particle movement in the field.
- Measure wind speed using an anemometer. If wind is less than 3 km/h, do not spray.
- Use smoke or powder to indicate particle movement the smoke or powder should drift gently with the wind. If it gathers in a stationary, suspended cloud, that indicates a temperature inversion– do not spray.
- Measure the temperature at ground level (approximately 1 metre or 3 feet) and at 2 metres or 7 feet above ground.

If the difference is more than a few degrees, it is considered an inversion.

Susceptible plants

Do not apply under circumstances where spray drift may occur to food, forage or other plantings that might be damaged, or crop production rendered unfit for sale, use or consumption. Vegetables, flowers, grapes, fruit trees and other desirable plants are sensitive to 2,4-D and glyphosate, even in minute quantities. Care should be taken to avoid spraying these types of plants or allowing spray mist to drift onto these plants during both their growing and dormant periods. Coarse sprays are less likely to drift.

Buffer zones to protect sensitive habitats

A one metre buffer is 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, 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.

When a tank mixture is used, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture.



Mixing Instructions

Enlist Duo™ herbicide mixes readily with water. Mix spray solutions of this product as follows:

1. Fill the mixing or spray tank with the required amount of clean water
2. Add the specified amount of this product near the end of the filling process and mix well

During mixing and application, foaming of the spray solution may occur. To prevent or minimize foaming, use a commercial defoamer or avoid the use of mechanical agitators, and/or terminate by-pass and return lines at the bottom of the tank.

Note: Use approved anti-back siphoning devices where required by provincial or local regulations to avoid siphoning back into the water source.

Drift control

Enlist Duo™ herbicide contains drift control technology. Using adjuvants and drift control additives with Enlist Duo™ herbicide with Colex-D™ technology may have a negative impact on spray stability and application performance. The addition of some adjuvants may also result in increased crop injury, decreased weed control, and/or increased potential for spray drift. Use only approved adjuvants and additives (tables 4-7). When a drift control additive is used, read and carefully observe the precautionary statements and all other information appearing on the product label.

Tank mixtures

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to, reduced pest efficacy or increased host crop injury. Contact the Solutions Center at **1-800-667-3852** or **www.corteva.ca** for information before mixing any pesticide or fertilizer that is not specifically recommended on the Enlist Duo™ herbicide label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on the label or that are not specifically recommended in this Product Use Guide.

Tank mixing with other products

Some herbicides, fungicides, micronutrients and insecticide products may require drift management and application settings that differ from Enlist Duo™ herbicide. Additionally, the formulation components of some products may contain inert ingredients that negatively affect the low-drift properties offered with Enlist Duo™ herbicide with Colex-D™ Technology. The approved list of tank mix partners for corn are listed in tables 4 and 5, and in tables 6 and 7 for soybeans. Tank mix to the most restrictive product label. If the most restrictive label reduces the agronomic benefit of an approved tank mix partner to an unacceptable level (i.e. a fungicide being applied in a coarse droplet), these products should not be tank-mixed with Enlist Duo™ Herbicide.

TANK MIXTURES: The following tables detail products that have been tank mixed with Enlist Duo™ herbicide, studied and reviewed by Corteva Agriscience™. This list is not all encompassing. Ensure that the specific product being used in the tank mixture is registered for application post-emergence (in-crop) to corn. Read and follow label directions of all products in the tank mixture.

Tank Mixtures Corn

ENLIST™ CORN TANK MIXES WITH ENLIST DUO™

Table 4

TANK MIXTURES	APPLICATION TIMING			NOTES
	PRE	EARLY POST 1-3 LEAF STAGE	LATE POST UP TO 8 LEAF STAGE	
HERBICIDES				
Enlist Duo™	✓	✓	✓	Spray up to 8 leaf corn
Enlist Duo™ + Aatrex®	✓	✓		Tank mix can have particulates settle out, continuous agitation is recommended. Do not use with AMS.
Enlist Duo™ + Acuron®	✓	✓		Acuron label restrictive up to 2 leaf stage corn.
Enlist Duo™ + Armezon® Pro	✓	✓		
Enlist Duo™ + Broadstrike™ RC	✓	✓	✓	
Enlist Duo™ + Callisto® + Aatrex®	✓	✓	✓	Tank mix can have particulates settle out, continuous agitation is recommended. Do not use with AMS.
Enlist Duo™ + Callisto®	✓	✓	✓	
Enlist Duo™ + Converge® XT		✓		Converge® XT label restrictive to 1-3 leaf corn.
Enlist Duo™ + Destra™ IS		✓	✓	Destra IS label applications 3-8 leaf corn.
Enlist Duo™ + Dual II Magnum® + Broadstrike™ RC	✓	✓		For early post-application follow leaf stage instructions on most restrictive label
Enlist Duo™ + Engarde™	✓	✓		Engarde label restrictive to pre-emergence to 2 leaf corn
Enlist Duo™ + Elevore™	✓			NOTE: Pre-plant application only up to 5 days before planting Enlist Corn
Enlist Duo™ + Eragon®	✓			Eragon® limited to Pre-plant / pre-emergent applications. Do not use with AMS.
Enlist Duo™ + Frontier® Max	✓	✓		Tank mix may have particulates settle out, continuous agitation is required.
Enlist Duo™ + Integrity®	✓			Per Integrity® label do not spray beyond pre-emergence
Enlist Duo™ + Lumax® EZ	✓	✓		Lumax® label limited to applications from pre- to 2- leaf corn
Enlist Duo™ + Marksman®	✓			Tank mix can have particulates settle out, continuous agitation is recommended. Do not use with AMS.
Enlist Duo™ + Primextra® + Broadstrike™ RC	✓			Tank mix can have particulates settle out, continuous agitation is recommended. Do not use with AMS.
Enlist Duo™ + Primextra® + Callisto®	✓			Tank mix can have particulates settle out, continuous agitation is recommended. Do not use with AMS.
Enlist Duo™ + Primextra®	✓			Tank mix can have particulates settle out, continuous agitation is recommended. Do not use with AMS.
Enlist Duo™ + Prowl® H2O	✓	✓		
Enlist Duo™ + Ultim™		✓	×	Ultim applications up to 6 leaf corn
Enlist Duo™ + Vios™		✓		
Enlist Duo™ + VP480™ or Credit® Extreme or Polaris™ MAX or Roundup WeatherMAX®	✓	×	×	These products tank mixed with Enlist Duo™ show a slight increase in driftable fines, which increases the risk of spray drift. Do not use beyond pre-emergence
Enlist Duo™ + Zidua® SC	✓	✓		Zidua® SC label allows for application up to 4 leaf corn.

Continued

Tank Mixtures Corn *Continued*

ENLIST™ CORN TANK MIXES WITH ENLIST DUO™

Table 5

TANK MIXTURES	APPLICATION TIMING			NOTES
	PRE	EARLY POST 1-3 LEAF STAGE	LATE POST UP TO 8 LEAF STAGE	
INSECTICIDES				
Enlist Duo™ + Lorsban™ 4E	✓	✓	✓	
Enlist Duo™ + Matador®	✓	✓	✓	
FUNGICIDES				
Enlist Duo™ + Headline®			✓	
Enlist Duo™ + Proline®			✓	
Enlist Duo™ + Priaxor®			✓	
Enlist Duo™ + Quadris®			✓	
Enlist Duo™ + Quilt®			✓	
FERTILIZERS AND ADJUVANT				
Enlist Duo™ + UAN (28%)	x	x	x	Tank mix not compatible - Do not attempt to spray
Enlist Duo™ + CropBooster®	✓	✓	✓	
Enlist Duo™ + AMS (Ammonium Sulphate)	✓	✓	✓	CAUTION: The addition of AMS to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience™ representative.
Enlist Duo™ + Accu-Spray®	✓	✓	✓	CAUTION: The addition of Accu-Spray® spray adjuvant to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience representative.
Enlist Duo™ + Fixate®	✓	✓	✓	CAUTION: The addition of Fixate® spray adjuvant to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience representative.
Enlist Duo™ + Interlock®	✓	✓	✓	CAUTION: The addition of Interlock® spray adjuvant to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience representative.

Tank Mixtures Soybeans

ENLIST E3™ SOYBEAN TANK MIXES WITH ENLIST DUO™

Table 6

TANK MIXTURES	APPLICATION TIMING			NOTES
	PRE	EARLY POST THIRD TRIFOLIATE	LATE POST UP R2 FULL FLOWER	
HERBICIDES				
Enlist Duo™	✓	✓	✓	
Enlist Duo™ + Assure™ II	×	×	×	Caution: Assure™ II tank mixed with Enlist Duo™ has tank mix compatibility issues. Continuous agitation is required. Tank mix is not recommended. Assure™ II mixed with a group 4 herbicides can have antagonism, application rate may need to be adjusted. Caution: Assure will not control volunteer Enlist™ corn.
Enlist Duo™ + Authority® Supreme	✓			
Enlist Duo™ + Blackhawk®	×			Do not use, both products contain 2,4-D
Enlist Duo™ + Bifecta™ co-pack	✓			
Enlist Duo™ + Boundary® LQD	✓			Boundary® label limited to pre-emergent
Enlist Duo™ + Boundary® LQD + Broadstrike™ RC	✓			Boundary® and Broadstrike™ RC label limited to pre-emergent
Enlist Duo™ + Boundary® LQD + FirstRate™	✓			Boundary® label limited to pre-emergent
Enlist Duo™ + Broadstrike™ RC	✓			Broadstrike™ RC label limited to pre-emergent
Enlist Duo™ + Canopy™ PRO	✓			Canopy™ PRO label limited to pre-emergent
Enlist Duo™ + Classic™	✓	✓	×	Classic™ should be applied before the initiation of flowering for maximum crop safety
Enlist Duo™ + Conquest®	✓			Conquest® label limited to pre-emergent
Enlist Duo™ + Dual II Magnum® + Broadstrike™ RC	✓			Dual II Magnum® and Broadstrike™ RC label limited to pre-emergent
Enlist Duo™ + Dual II Magnum® + FirstRate™	✓			Dual II Magnum® label limited to pre-emergent
Enlist Duo™ + Eragon®	✓			Eragon® limited to pre-emergent. Do not use with AMS.
Enlist Duo™ + Elevore™	✓			NOTE: Pre-plant application only up to 7 days before planting Enlist™ Soybeans
Enlist Duo™ + Fierce™	✓			
Enlist Duo™ + FirstRate™	✓	✓	×	For maximum crop safety tank-mixes with FirstRate™ should be applied early post
Enlist Duo™ + Freestyle™	✓	✓		Freestyle™ early post should be applied at the lower rate (30 ac/case)
Enlist Duo™ + Diligent™ or Guardian™ Plus WDG	✓			Apply up to 3 days after planting
Enlist Duo™ + Frontier® Max	✓			Frontier® label limited to pre-emergent
Enlist Duo™ + Optill®	✓			Optill® label limited to pre-emergent
Enlist Duo™ + Prowl® H2O	✓			Prowl® label limited to pre-emergent
Enlist Duo™ + Pursuit®	✓	✓		
Enlist Duo™ + Poast® Ultra	✓	✓	✓	
Enlist Duo™ + Select®	✓	✓	✓	
Enlist Duo™ + Valtera®	✓			Label limited to pre-emergent up to 3 days after planting
Enlist Duo™ + VP480™ or Credit® Extreme or Polaris™ MAX or Roundup WeatherMAX®	✓	×	×	These products tank mixed with Enlist Duo™ show a slight increase in driftable fines, which increases the risk of spray drift. Do not use beyond pre-emergence
Enlist Duo™ + Zidua®	✓			Zidua® label limited to pre-emergent

Tank Mixtures Soybeans *Continued*

ENLIST E3™ SOYBEAN TANK MIXES WITH ENLIST DUO™

Table 7

TANK MIXTURES	APPLICATION TIMING			NOTES
	PRE	EARLY POST 1-3 LEAF STAGE	LATE POST UP TO 8 LEAF STAGE	
INSECTICIDES				
Enlist Duo™ + Delegate™	✓	✓	✓	
Enlist Duo™ + Lygon or Cygon®		✓	✓	
Enlist Duo™ + Matador®		✓	✓	
FUNGICIDES				
Enlist Duo™ + Acapela™			✓	
Enlist Duo™ + Headline™			✓	
Enlist Duo™ + Priaxor®			✓	
Enlist Duo™ + Proline®			✓	
Enlist Duo™ + Quadris®			✓	
Enlist Duo™ + Quilt®			✓	
FERTILIZERS AND ADJUVANT				
Enlist Duo™ + Accu-Spray®	✓	✓	✓	CAUTION: The addition of Accu-Spray® spray adjuvant to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience™ representative.
Enlist Duo™ + CropBooster®		✓	✓	
Enlist Duo™ + CropBooster® 15-3-6		✓	✓	
Enlist Duo™ + Enhance®		✓	✓	
Enlist Duo™ + Oligo® -MN		✓	✓	
Enlist Duo™ + RR SoyBooster®		✓	✓	
Enlist Duo™ + SuperMn+		✓	✓	
Enlist Duo™ + AMS (Ammonium Sulphate)	✓	✓	✓	CAUTION: The addition of AMS to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience representative.
Enlist Duo™ + Fixate®	✓	✓	✓	CAUTION: The addition of Fixate® spray adjuvant to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience representative.
Enlist Duo™ + Interlock®	✓	✓	✓	CAUTION: The addition of Interlock® spray adjuvant to Enlist Duo™ in combination with additional tank-mix partners will change the chemical makeup of the spray solution which may negatively impact the spray quality benefits of an Enlist Duo™ tank mix. For more information, please consult your local Corteva Agriscience representative.

Restrictions

- Do not apply Enlist Duo™ herbicide by air or by a boomless ground sprayer
- Do not apply more than two post-emergent applications per use season
- Do not apply more than 8.6 L/ha (3.5 L/ac) per use season

Recropping

- Following an Enlist Duo™ herbicide application
 - There are no crop rotational restrictions in the following season (10 months after applications)
 - During the growing season if replanting is required following application of Enlist Duo™ herbicide, observe all planting restrictions for 2,4-D pre-plant applications (i.e. delay planting a crop sensitive to 2,4-D)

Record Keeping

As part of good farm management practices, maintain detailed spray records, including:

- Field location and number of hectares sprayed
- Crop sprayed and stage of growth
- Date of application, start time, and finish time
- Herbicide sprayed and application rate
- Nozzles used and operating pressure
- Travel speed and application rate
- Air temperature and relative humidity
- Wind speed and direction
- Sprayer and boom clean out



Sprayer and Equipment Clean Out

To avoid injury to desirable plants, thoroughly clean equipment used to apply this product before re-use or using it to apply other chemicals.

STEP 1

Immediately after spraying, completely drain the sprayer tank. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.

STEP 2

First rinse:

- Spray the inside of tank with clean water and fill the sprayer with at least one tenth of the spray tank volume
- Agitate and circulate for 15 minutes, and flush through booms and hoses
- Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles
- Drain tank completely

STEP 3

Second rinse:

- Fill the tank with clean water
- Add All Clear Spray Tank Decontaminator, or Clean-Out Spray Tank Cleaner, or 1 L of household ammonia (containing a minimum of 3 % ammonia) per 100 L of water, or similar tank cleaning agent as per manufacturer's recommendations while filling the tank with clean water
- Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full. Allow to stand for 15 minutes with agitation. Flush the solution out of the spray tank through the spray booms.

- Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles
- If possible, let the solution stand in the sprayer tank and booms for an extended period of time, overnight if possible
- After flushing the boom and hoses, drain tank completely
- Remove nozzles and screens and clean separately with a cleaning agent or an ammonia solution (100 mL in 10 L water)

STEP 4

Third rinse:

- Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume
- Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles
- Drain tank completely

Do not use ammonia with chlorine bleach. Using ammonia with chlorine bleach will release a gas with a musty odour which may cause eye, nose, throat and lung irritation. Do not clean equipment in an enclosed area.



Contact Us

If you have questions about proper handling and use of these products or if you become aware of potential misuse or incidents involving these products, please call The Solutions Center at **1-800-667-3852**.

If you have questions about the use of these or any other Corteva Agriscience™ products in Canada, please call **1-800-667-3852** and talk to the Solutions Center.



Patent Statement

This Seed is protected under one or more patents. Grower is provided a limited license under the Technology Use Agreement to purchase Seed from Seed Seller and to plant Purchased Seed to produce a single commercial crop in Canada. Grower is NOT permitted: (1) to supply, transfer, license or sublicense any Seed or Dow AgroSciences' Sourced Technology to any other person, entity or other third party for planting or any other purposes; (2) to save or use any seed produced from Seed for planting by Grower or any other third party; or (3) to use or allow others to use Seed or any plant material produced from Seed for crop breeding, seed production, research (including, without limitation, agronomic testing or generation of comparative data against seed containing Third-Party Trait Technology), or generation of regulatory approval data.



Regulatory approvals are pending in other geographies for the Enlist™ herbicide solution and crops containing Enlist herbicide tolerance traits. Roundup Ready is a registered trademark of Monsanto Technology LLC. Always follow weed resistance management, insect resistance management, grain marketing and all other stewardship practices and pesticide label directions. Enlist™ corn contains genes that confer tolerance to 2,4-D, glyphosate, and quizalofop. Enlist E3™ soybeans contain genes that confer tolerance to 2,4-D, glyphosate and glufosinate. Roundup Ready crops contain genes that confer tolerance to glyphosate herbicides. Glyphosate herbicides will kill crops that are not tolerant to glyphosate. ®Excellence Through Stewardship is a registered trademark of Excellence Through Stewardship. ®Responsible Care is a registered service mark of the American Chemistry Council. Always read and follow label directions.