

# FirstRate<sup>TM</sup> Herbicide

GROUP 2 HERBICIDE

FOR SALE FOR USE IN EASTERN CANADA ONLY. For broadleaved weed control in soybeans.

COMMERCIAL

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

ACTIVE INGREDIENT: cloransulam-methyl 84%

Wettable granules

Warning, contains the allergen sulfites.

REGISTRATION NO. 33619 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 8 g to bulk

Corteva Agriscience Canada Company

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# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN.

## PERSONAL PROTECTIVE EQUIPMENT

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment. If no instructions are available for washables, use detergent and hot water. Keep and wash personal protective equipment separately from other household laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

#### **OPERATOR USE PRECAUTIONS**

After handling this product, users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the washroom.
- Remove clothing immediately, if herbicide penetrates clothing. Wash thoroughly and put on clean clothing.
- Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **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 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 a 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.

#### TOXICOLOGICAL INFORMATION

No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

#### AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

# **ENVIRONMENTAL PRECAUTIONS**

Do not apply directly to waterbodies. Do not contaminate water when disposing of equipment washwaters.

Toxic to non-target terrestrial plants and aquatic organisms.

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 strip between the treated area and the edge of the water body.

Caution should be exercised when handling this product at mixing and loading sites to prevent contamination of water supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Use a back-flow device when filling sprayer tank with water to prevent back-siphoning into water supply.

Do not contaminate water used for domestic purposes.

#### **STORAGE**

Store in original container in a secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. To prevent contamination store this product away from food or feed. Do not store at temperatures above 50°C for extended periods of time. If the container is damaged and a spill occurs, either use the clean product immediately or sweep-up the spilled granules and dispose of as waste.

#### **DISPOSAL**

- 1. Dispose of the outer package in accordance with provincial requirements.
- 2. 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 clean-up of spills.

# **GENERAL INFORMATION**

FirstRate™ Herbicide controls certain broadleaved weeds in soybeans. FirstRate Herbicide may be applied preemergence or postemergence.

#### **GENERAL USE PRECAUTIONS**

FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. READ ALL DIRECTIONS CAREFULLY BEFORE APPLYING.

- DO NOT APPLY BY AIR.
- Application is limited to agricultural crops only when there is low risk of 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. To minimize spray drift to non-target areas:
  - 1. Do not use nozzles that produce a fine spray droplet.
  - 2. Minimize drift by using sufficient spray volume to ensure adequate coverage with large droplet size sprays.
  - 3. Keep ground-driven spray boom as low as possible above the target surface.
  - 4. Spray when conditions are calm or wind speed is less than 10 km/hr.
- Adequate soil moisture is required for optimum herbicide activity. Preemergence or early
  postemergence applications require an activating rainfall which moistens the soil to a depth of at least
  5 cm.
- Do not apply when air temperature is near freezing or when freezing conditions are expected for several days following time of application.
- Extended cold, wet conditions (soil temperatures below 10°C for extended periods) or abnormally high soil moisture conditions during emergence and early crop development may cause injury symptoms on soybeans such as temporary yellowing of the leaves and/or crop stunting. Soybeans will quickly outgrow these symptoms once normal growing conditions resume.
- Make only 1 application per year.

- Soil applications of FirstRate Herbicide on soils with greater than 5% organic matter may result in reduced weed control. Under these conditions, postemergence applications of FirstRate Herbicide may be required to control specific weeds, however, residual control will be reduced.
- Do not apply to peat or muck soils.
- Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

# Sprayer 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.

- 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.
- 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.

# 3. Second rinse:

- Fill the tank with clean water.
- Add All Clear Spray Tank Decontaminator 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).

# 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.

# **ROTATIONAL CROP RESTRICTIONS**

When tank mixing with other herbicides, follow the crop rotation on the label of each product used.

Crop	Rotational Interval (Months)
soybean	0
wheat	4
corn	9

A field bioassay should be conducted before planting other crops not listed above. A successful field bioassay means growing to maturity test strips of the crop(s) intended for production the following year.

## Field Bioassay

Using typical tillage, seeding practices, and timings for the particular crop, plant several strips of the desired crop across the field previously treated with FirstRate Herbicide. Plant the strips perpendicular to the direction FirstRate Herbicide was applied. The strips should also be located so that different field conditions are encountered, including soil texture, drainage and compacted areas. If the crop does not show visible symptoms of injury or stand reduction, the field can be seeded with the test crop in the growing season following the bioassay. If visible injury or stand reduction occurs, the test crop should not be seeded and the bioassay must be repeated the next growing season.

#### PREHARVEST INTERVALS

Do not harvest soybean plants for forage or hay. Do not harvest soybeans for 65 days after application.

Caution: Do not graze the treated crops or cut for hay; sufficient data are not available to support this use.

#### **DIRECTIONS FOR USE**

FirstRate Herbicide is registered for use on soybeans in Eastern Canada as a preemergence or postemergence application.

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.

<u>Field sprayer application</u>: 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.

## **Buffer Zones**

Spot treatments using hand-held equipment do not require a buffer zone.

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, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop	Buffer Zones (metres) Required for the Protection	
		Freshwater Habitat	Terrestrial Habitat
Field sprayer	Soybean	7	35

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.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

# PREEMERGENCE APPLICATION

Preemergence applications may be made in both conventional and conservation tillage systems. Apply after planting but prior to crop or weed emergence. FirstRate Herbicide may be applied alone or in tank-mix combination with Broadstrike™Dual, or Pursuit. When applied as a tank-mix combination, read and observe all label directions, including rates, personal protective equipment, restrictions and precautions for each product used in the tank-mix. Always use in accordance with the most restrictive label restrictions and precautions.

# Weeds Controlled by FirstRate Herbicide alone

cocklebur lamb's-quarters common ragweed velvetleaf

Adequate soil moisture is necessary for optimum herbicidal efficacy. Rainfall is necessary to move FirstRate Herbicide into the weed germination zone. Sufficient rainfall to moisten the soil to a depth of 5 cm is generally adequate. If adequate rainfall is not received within 7 to 10 days after application, a shallow cultivation or use of a rotary hoe is recommended to control established weeds and move the herbicide into the weed germination zone. When adequate rainfall is received following dry conditions, activity on established weeds will depend on the weed species and the location of the root system in the soil

# **Rates Of Application**

# FirstRate Herbicide Applied Alone

Component	Amount	Weeds Controlled
FirstRate Herbicide	20.8 g/ha	Common Ragweed, Velvetleaf, Lambsquarters
	41.7 g/ha Common Ragweed, Velvetleaf, Cocklebu heavy infestations of Lambsquarters	

# FirstRate Herbicide Plus Broadstrike Dual

Component	Amount	Weeds Controlled
FirstRate Herbicide	20.8 g/ha	Common Ragweed, Velvetleaf, Cocklebur,
		Lambsquarters plus weeds on the Broadstrike
Broadstrike Dual	2.4 L/ha	Dual label

# FirstRate Herbicide Plus Pursuit

Component	Amount	Weeds Controlled
FirstRate Herbicide	20.8 g/ha	Common Ragweed, Velvetleaf, Cocklebur, Lambsquarters plus weeds on the Pursuit label
Pursuit	312 mL/ha	

#### POSTEMERGENCE APPLICATION

FirstRate Herbicide may be applied any time prior to the flowering stage of soybeans. Application prior to full emergence of the first trifoliate leaf may cause temporary yellowing of soybeans. This effect is transient and has no effect on soybean yields. Application timing restrictions of tank-mix partners should be followed. When applied as a tank-mix combination, read and observe all label directions, including rates, personal protective equipment, restrictions and precautions for each product used in the tank-mix. Always use in accordance with the most restrictive label restrictions and precautions.

Weeds controlled by FirstRate	Leaf Stage	
Herbicide alone		
cocklebur, common	4 to 8	
jimsonweed	2 to 4	
ragweed, common	4 to 8	
ragweed, giant	4 to 6	
velvetleaf	2 to 4	

Postemergence applications of FirstRate Herbicide will provide residual soil activity on broadleaved weeds. Length and effectiveness of residual activity from postemergence applications is dependent on rainfall following application (2 cm or more rainfall within a week of application), density of the weed and crop canopy at application, the reserve of non-germinated weed seeds in surface soil and soil organic matter (>5%).

# **Rates Of Application**

# FirstRate Herbicide Applied Alone

Component	Amount	Weeds Controlled
FirstRate Herbicide	20.8 g/ha	Common Ragweed, Velvetleaf, Cocklebur,
		Jimsonweed, Giant Ragweed
Non-ionic Surfactant*	0.25% v/v	
Liquid Fertilizer	2.5% v/v	
28-0-0 or 32-0-0		

#### FirstRate Herbicide Plus Pursuit

Component	Amount	Weeds Controlled
FirstRate Herbicide	20.8 g/ha	Common Ragweed, Velvetleaf, Cocklebur, Jimsonweed, Giant Ragweed plus weeds on the
		Julisonweed, Glant Nagweed plus weeds on the
Pursuit	312 mL/ha	Pursuit label
Non-ionic Surfactant*	0.25% v/v	
Liquid Fertilizer	2 L/ha	
28-0-0 or 32-0-0		

<sup>\*</sup>The non-ionic surfactant Agral 90 and liquid fertilizer should be added to the spray tank last.

# Weed Control in Glyphosate Tolerant Soybean, i.e., Varieties with the Roundup Ready Gene

**WARNING**: Apply Roundup Herbicide on glyphosate tolerant soybean varieties only, i.e., varieties with the Roundup Ready gene.

**NOTE**: ALWAYS USE PEDIGREED (I.E., CERTIFIED) SOYBEAN SEED DESIGNATED AS GLYPHOSATE TOLERANT. SOYBEANS WHICH ARE NOT DESIGNATED AS GLYPHOSATE TOLERANT WILL BE DAMAGED OR DESTROYED BY THIS TREATMENT.

# FirstRate Herbicide Plus Glyphosate

Component	Amount	Weeds Controlled
FirstRate Herbicide	20.8 g/ha	Common Ragweed,
		Velvetleaf, Cocklebur,
Glyphosate at:	270 – 1260 g ae/ha, equivalent to:	Jimsonweed, Giant
		Ragweed plus all other
	0.5 - 2.33 L/Ha of 540 g/L formulation	weeds on the glyphosate
	0.56 - 2.63 L/Ha of 480 g/L formulation	label.
	0.75 - 3.5 L/ha of 360 g/L formulation	
Non-ionic Surfactant*	0.125% v/v	
Liquid Fertilizer	2.5% v/v	
28-0-0 or 32-0-0		

<sup>\*</sup> The non-ionic surfactant Agral 90 and liquid fertilizer should be added to the spray tank last.

# MIXING AND APPLICATION SPRAY PREPARATION

FirstRate Herbicide is a wettable granule formulation. Thorough mixing is required. Vigorous, continuous agitation during mixing, filling and throughout application is required. Sparger pipe agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank avoid stirring or splashing air into the spray mixture. To prevent foaming during filling keep end of fill pipe below the surface of the liquid in the spray tank. The addition of an anti-foaming agent such as Halt<sup>®</sup> may also reduce foaming.

The following method is recommended:

- 1. Fill the spray tank with 1/4 to 1/3 of the total amount of water required for the load.
- 2. Start the agitation system.
- 3. Add the correct amount of FirstRate Herbicide to the water in the spray tank with the agitator running.
- 4. Continue agitation until the product is completely dispersed.
- 5. For postemergence applications only: Add the non-ionic surfactant and liquid fertilizer.
- 6. Complete filling spray tank while continuing agitation system.
- 7. Before spraying, make sure the product is thoroughly dispersed in the water.

If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be re-suspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to re-suspend than when originally mixed. Line screens in the spray tank should be no finer than 50 mesh.

## **Spray Application**

Apply FirstRate Herbicide in sufficient spray volume to provide uniform coverage using properly calibrated ground equipment. A total spray volume of 100 to 300 L/ha using low pressure (135 to 270 kPa) application is recommended. Maintain sufficient agitation in the sprayer tank during spraying to ensure a uniform spray mixture. Apply spray mixture within 24 hours after mixing. If the product is allowed to settle, thoroughly agitate to re-suspend the mixture before spraying.

**NOTE TO USER:** READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS: The DIRECTIONS FOR USE for this product for the use(s) described below were developed by persons other than Corteva Agriscience Canada Company and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Corteva Agriscience Canada Company itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agrees to hold Corteva Agriscience Canada Company harmless from any claims based on efficacy and/or phytotoxicity in connection with the use(s) described on this label.

# **DIRECTIONS FOR USE**

# POSTEMERGENCE APPLICATION TO SOYBEANS

For control of Canada fleabane (up to the 20 leaf stage) and suppression of horsenettle. Make one postemergent ground application per year.

# **Application rate**

Apply at a rate of 20.8 g/ha

# PREEMERGENCE APPLICATION TO SOYBEANS

For the control of Giant Ragweed, apply FirstRate Herbicide after planting but prior to crop emergence.

# **Application rate**

For the control of Giant Ragweed (pre-emergence and cotyledon to 4 leaf stage), apply FirstRate Herbicide at a rate of 41.7 grams of product per hectare.

For control of Giant Ragweed (cotyledon to 6 leaf stage) apply FirstRate Herbicide at a rate of 20.8 grams of product per hectare plus 0.25% v/v Agral 90 plus 2.5% v/v liquid fertilizer (28-0-0 or 32-0-0).

Refer to the main FirstRate Herbicide label for additional details and instructions, including preharvest intervals, before using.

READ THE ROTATIONAL CROPPING RESTRICTIONS ON THE FULL LABEL BEFORE USING THIS PRODUCT.

#### WEED RESISTANCE MANAGEMENT

FirstRate Herbicide is a Group 2 herbicide. Any weed population may contain plants naturally resistant to FirstRate Herbicide and other Group 2 herbicides. The resistant individuals can eventually dominate the weed population if these herbicides are used repeatedly. These resistant weeds will not be controlled by FirstRate Herbicide or other Group 2 herbicides. To delay herbicide resistance:

- Avoid the exclusive, repeated use of FirstRate Herbicide or other herbicides in the same herbicide group.
- Rotate with herbicides from a different herbicide group that control the same weeds as FirstRate Herbicide.
- Use tank mixes with herbicides from different groups when a use is permitted.
- Integrate tillage or other mechanical cultural control methods into weed control programs whenever practical.
- Prevent movement of resistant weeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Keep accurate records of crop rotation and herbicides used in each of your fields.
- For further information, contact your local Corteva Agriscience representative.

**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-33619-002-E Replaces: CN-33619-001-E

Specimen Notes:

Legal Entity change from DAS to Corteva