Container

GROUP 2 HERBICIDE

# CS-100-31155 HERBICIDE

## Wettable Granules

# FOR SALE FOR USE ON SPRING WHEAT AND DURUM WHEAT IN THE PRAIRIE PROVINCES AND THE INTERIOR OF BRITISH COLUMBIA

## AGRICULTURAL

## **REGISTRATION NO. 32576 PEST CONTROL PRODUCTS ACT**

ACTIVE INGREDIENTS:	Pyroxsulam	14.7%
	Thifensulfuron-methyl	9.8%
	Tribenuron-methyl	4.9%
	Metsulfuron-methyl	1.5%

Warning: Contains the allergens milk and sulfites

POTENTIAL SKIN SENSITIZER CAUTION EYE IRRITANT

## **NET CONTENTS:** 102.5 grams – bulk Kg

## READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

FMC of Canada Limited 6755 Mississauga Road, Suite 204 Mississauga, ON L5N 7Y2 1-833-362-7722

## **PRECAUTIONS:**

- POTENTIAL SKIN SENSITIZER
- CAUTION EYE IRRITANT
- KEEP OUT OF REACH OF CHILDREN.
- AVOID BREATHING SPRAY MIST. USE WITH ADEQUATE VENTILATION.
- AVOID CONTACT WITH SKIN, EYES AND CLOTHING, WEAR COVERALLS OVER LONG-SLEEVED SHIRT AND LONG PANTS, CHEMICAL-RESISTANT GLOVES, SOCKS, CHEMICAL-RESISTANT FOOTWEAR AND GOGGLES OR FACE SHIELD DURING MIXING, LOADING, APPLICATION, CLEAN UP AND REPAIR. FOR CLOSED CAB APPLICATION COVERALLS AND GLOVES ARE NOT NECESSARY.
- DO NOT CONTAMINATE ANY BODY OF WATER.
- WHEN USING, DO NOT EAT, DRINK OR SMOKE. WASH SKIN THOROUGHLY WITH SOAP AND WATER AFTER HANDLING.
- REMOVE CONTAMINATED CLOTHING IMMEDIATELY AFTER USE. STORE AND WASH CONTAMINATED CLOTHING SEPARATELY FROM HOUSEHOLD LAUNDRY BEFORE REUSE.
- DO NOT APPLY BY AIR
- DO NOT ENTER OR ALLOW WORKER RE-ENTRY FOR 12 HOURS AFTER APPLICATION.

## FIRST AID:

#### IF IN EYES:

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

#### 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 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 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.

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

## IN CASE OF EMERGENCY, CALL TOLL FREE, DAY OR NIGHT: 1-800-331-3148

## TOXICOLOGICAL INFORMATION:

Treat symptomatically.

## **ENVIRONMENTAL PRECAUTIONS:**

- TOXIC to aquatic organisms and non-target terrestrial plants. Overspray or drift to important wildlife habitats such as shelterbelts, wetlands, sloughs or dry slough borders and woodlots should be avoided. Observe buffer zones specified under DIRECTIONS FOR USE.
- To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as 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.
- Leaching: The use of this chemical may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

## STORAGE:

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed.

## DISPOSAL:

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

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

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

#### **Refillable Containers:**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

#### Returnable Containers:

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

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

#### 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.

<sup>®/TM</sup> Registered trademarks/trademarks of FMC Corporation or an affiliate.

DFU Booklet

GROUP 2 HERBICIDE

## CS-100-31155 HERBICIDE

#### Wettable Granules

# FOR SALE FOR USE ON SPRING WHEAT AND DURUM WHEAT IN THE PRAIRIE PROVINCES AND THE INTERIOR OF BRITISH COLUMBIA

## AGRICULTURAL

## **REGISTRATION NO. 32576 PEST CONTROL PRODUCTS ACT**

ACTIVE INGREDIENTS:	Pyroxsulam	14.7%
	Thifensulfuron-methyl	9.8%
	Tribenuron-methyl	4.9%
	Metsulfuron-methyl	1.5%

Warning: Contains the allergens milk and sulfites

POTENTIAL SKIN SENSITIZER CAUTION EYE IRRITANT

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING FMC of Canada Limited 6755 Mississauga Road, Suite 204 Mississauga, ON L5N 7Y2 1-833-362-7722

## TABLE OF CONTENTS:

PRECAUTIONS:	6
TOXICOLOGICAL INFORMATION:	6
ENVIRONMENTAL PRECAUTIONS:	7
STORAGE:	7
DISPOSAL:	
PRODUCT DESCRIPTION:	7
REPLANTING TO OTHER CROPS	
GRAZING/HARVEST RESTRICTIONS:	
VARIETY RESTRICTIONS:	
RAINFASTNESS INFORMATION:	
APPLICATION INFORMATION:	
APPLICATION PRECAUTIONS:	
APPLICATION INSTRUCTIONS:	
DIRECTIONS FOR USE:	
BUFFER ZONES: 1	
SPRING WHEAT AND DURUM WHEAT 1	
CS-100-31155 HERBICIDE 1	
CS-100-31155 HERBICIDE + MCPA ESTER 1	
MIXING INFORMATION: 1	
MIXING PRECAUTIONS: 1	
MIXING DIRECTIONS: 1	-
SPECIAL MIXING INSTRUCTIONS FOR CHEMICAL HANDLERS	
EQUIPMENT CLEANING INFORMATION: 1	
CLEANING PRECAUTIONS: 1	4
CLEANING INSTRUCTIONS: 1	
RESISTANCE-MANAGEMENT RECOMMENDATIONS: 1	5
NOTICE TO USER:	5

## PRECAUTIONS:

- POTENTIAL SKIN SENSITIZER
- CAUTION EYE IRRITANT
- KEEP OUT OF REACH OF CHILDREN.
- AVOID BREATHING SPRAY MIST. USE WITH ADEQUATE VENTILATION.
- AVOID CONTACT WITH SKIN, EYES AND CLOTHING, WEAR COVERALLS OVER LONG-SLEEVED SHIRT AND LONG PANTS, CHEMICAL-RESISTANT GLOVES, SOCKS, CHEMICAL-RESISTANT FOOTWEAR AND GOGGLES OR FACE SHIELD DURING MIXING, LOADING, APPLICATION, CLEAN UP AND REPAIR. FOR CLOSED CAB APPLICATION COVERALLS AND GLOVES ARE NOT NECESSARY.
- DO NOT CONTAMINATE ANY BODY OF WATER.
- WHEN USING, DO NOT EAT, DRINK OR SMOKE. WASH SKIN THOROUGHLY WITH SOAP AND WATER AFTER HANDLING.
- REMOVE CONTAMINATED CLOTHING IMMEDIATELY AFTER USE. STORE AND WASH CONTAMINATED CLOTHING SEPARATELY FROM HOUSEHOLD LAUNDRY BEFORE REUSE.
- DO NOT APPLY BY AIR
- DO NOT ENTER OR ALLOW WORKER RE-ENTRY FOR 12 HOURS AFTER APPLICATION.

#### FIRST AID:

#### IF IN EYES:

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

#### 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 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 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.

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

## IN CASE OF EMERGENCY, CALL TOLL FREE, DAY OR NIGHT: 1-800-331-3148

#### TOXICOLOGICAL INFORMATION:

Treat symptomatically.

## **ENVIRONMENTAL PRECAUTIONS:**

- TOXIC to aquatic organisms and non-target terrestrial plants. Overspray or drift to important wildlife habitats such as shelterbelts, wetlands, sloughs or dry slough borders and woodlots should be avoided. Observe buffer zones specified under DIRECTIONS FOR USE.
- To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as 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.
- Leaching: The use of this chemical may result in contamination of groundwater, particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

#### STORAGE:

Store product in original container only, away from other pesticides, fertilizer, food or feed. Not for use or storage in or around the home. Keep container closed

## DISPOSAL:

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

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

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

#### **Refillable Containers:**

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

#### **Returnable Containers:**

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

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

## **PRODUCT DESCRIPTION:**

CS-100-31155 Herbicide is recommended for selective post-emergent control or suppression of broadleaf weeds and grasses in wheat (spring and durum) not underseeded to legumes or grasses.

CS-100-31155 Herbicide is to be mixed with water and a recommended adjuvant and applied as a uniform broadcast spray. Recommended adjuvants are: AGRAL\* 90, LIBERATE\* ADJUVANT, AGSURF\* II, HIACTIVATE\* NON-IONIC LIQUID SPREADER/ACTIVATOR, SUPER SPREADER

ADJUVANT, ENHANCE\*, PRO-SURF\* II AND SENTRY. It is non-corrosive, non-flammable, non-volatile and does not freeze.

Apply CS-100-31155 Herbicide early postemergence, to the main flush of actively growing broadleaf and grassy weeds. APPLY WITH GROUND EQUIPMENT ONLY. Warm, moist growing conditions promote active weed growth and enhance the activity of CS-100-31155 Herbicide by allowing maximum foliar uptake and contact activity. Weeds hardened off by cold weather or drought stress may not be adequately controlled or suppressed and regrowth may occur. For best results, ensure thorough spray coverage of target weeds. See "DIRECTIONS FOR USE" section of this label for complete use details.

CS-100-31155 Herbicide stops growth of susceptible weeds rapidly. However, typical symptoms (discolouration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending upon growing conditions and weed susceptibility. Degree of control and duration of effect are dependent on weed sensitivity, weed size, crop competition, growing conditions at and following treatment, and spray coverage.

## IMPORTANT INFORMATION: READ BEFORE USING

Injury to or loss of desirable trees or vegetation may result from failure to observe the following:

- Do not apply, 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, recreational grounds or similar areas.
- Prevent drift of spray to desirable plants.
- Do not contaminate any body of water, including irrigation water that may be used on other crops. Do not apply to land where tail water will be used to irrigate cropland
- Do not remove soil from treated fields for use on lawns, in gardens or for back fill.
- Carefully observe sprayer clean-up instructions, as spray tank residues may damage crops other than wheat and spring barley.
- Do not apply through any type of irrigation system.

## **REPLANTING TO OTHER CROPS**

MINIMUM CROP ROTATION GUIDELINES:

The following crops may be seeded 10 months after application: field corn.

The following crops may be seeded 11 months after application: barley, canola, dry beans, flax, oats, peas, soybeans, and spring wheat.

The following crops may be seeded 22 months after application: lentils.

#### **GRAZING/HARVEST RESTRICTIONS:**

Livestock may be grazed on treated crops 7 days following application. Do not harvest the treated crop within 60 days after application.

#### VARIETY RESTRICTIONS:

Limit the use of CS-100-31155 Herbicide to currently licensed varieties of wheat (spring or durum). Consult FMC prior to use on unlicensed varieties for crop tolerance information.

## **RAINFASTNESS INFORMATION:**

If foliage is wet at the time of application control may be decreased. Applications of CS-100-31155 Herbicide are rainfast within 2 hours after application.

#### **APPLICATION INFORMATION:**

#### **APPLICATION PRECAUTIONS:**

- DO NOT APPLY BY AIR.
- Overspray or drift to important wildlife habitats such as shelterbelts, wetlands, sloughs or dry slough borders and woodlots should be avoided.
- Apply with an adjuvant registered for use with CS-100-31155 Herbicide. Use only water as a carrier. Other carriers may accelerate breakdown of CS-100-31155 Herbicide and reduce its effectiveness.
- Do not apply to crops underseeded to legumes or grasses as injury to forage may result.
- Application to crops that are stressed by severe weather conditions, frost, low fertility, water logged soil (soil at or near field capacity), disease or insect damage may result in crop injury. Drought, disease or insect damage following application may also result in crop injury.
- Under certain conditions, such as heavy rainfall, prolonged cool weather, frost or wide fluctuations in day/night temperatures, temporary lightening in crop colour, and occasionally, a slight reduction in crop height may occur.
- Occasionally slight yellowing or height reduction may be observed in the treated crop. These transient symptoms disappear within 14 days with no reduction to yield. Do not apply to crops suffering from drought, nutrient deficiency or exposed to frost or other agronomic factors affecting plant growth.
- Under conditions of low crop and high weed density, control may be reduced
- Do not apply more than 102.5 grams/hectare of CS-100-31155 Herbicide per year.
- Apply only when the potential for drift to areas of human habitation or 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.
- DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

#### **APPLICATION INSTRUCTIONS:**

Apply the spray mixture uniformly with properly calibrated ground equipment only. Ensure thorough coverage and a uniform spray pattern. Flat fan nozzles are recommended (minimum 55 litres spray volume per hectare). Use 50 mesh or larger filter screens (metal or nylon). A spray pressure of 210-275 kPa is recommended. Avoid overlapping and shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over application.

#### DIRECTIONS FOR USE:

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

Field Sprayer Application:

• **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty.

• **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. Boom height must be 60 cm or less above the crop or ground.

## Buffer zones:

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

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, pastures, rangelands, riparian areas and shrub lands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

		Buffer Zones (metres) Required for the Protection of:				
Method of Crop		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial Habitat
application		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer*	Wheat (spring, durum)	1	1	1	0	5

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

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.

NOTE: Applicators may recalculate a site-specific buffer zone by combining information on current weather conditions and spray configuration for the following applications: all airblast applications, and for field and aerial applications which specify the following droplet size category wording on the product label: 'DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) coarse classification. To access the Buffer Zone Calculator, please visit the Pest Management Regulatory Agency web site.

## SPRING WHEAT AND DURUM WHEAT

#### CS-100-31155 HERBICIDE

**LOCATION:** Prairie Provinces and the interior of British Columbia only.

CROP(S): Spring wheat and durum wheat

**TIMING:** Post-emergent application from the 3 -leaf stage to just before the flag leaf (shot blade) stage of the crop, prior to head emergence, but before the crop canopy will prevent thorough coverage of target weeds. Do not apply after head has emerged. For best results, apply to young, actively growing weeds: broadleaf weeds that are less than 10 cm in height or diameter (unless otherwise specified) and grass weeds that are up to the 4 leaf, 2 tiller stage (unless otherwise specified). Thorough coverage of target weeds is essential. Extreme growing conditions such as drought or near freezing temperature prior to, at or following time of application may reduce weed control and increase the risk of crop injury at all stages of growth. Under conditions of low crop and high weed density, control may be reduced.

APPLICATION RATES	
CS-100-31155 Herbicide	102.5 grams/hectare
Adjuvants: Agral <sup>*</sup> 90 Liberate <sup>*</sup> Adjuvant, Ag-Surf <sup>*</sup> II,	2.5 litres/1000 litres spray solution
HiActivate* Non-ionic Liquid Spreader/Activator, Super	
Spreader Adjuvant, Enhance*, Pro-Surf* II or Sentry*	

BROADLEAF WEEDS CONTROLLED	GRASS WEEDS CONTROLLED
Annual smartweed (green smartweed, lady's thumb)	Barnyard grass (1-5 leaf)
Ball Mustard	Japanese Brome (1-6 leaf)
Cleavers (up to 6 whorl)	Wild oats (up to 4 leaf, 2 tiller)
Common chickweed <sup>1</sup>	Yellow foxtail (1-5 leaf)
Corn Spurry (up to 2 whorl stage, < 10 cm in height)	
Cow cockle	Grass Weeds Suppressed
Flixweed	Downy brome (2-6 leaf, 4 tillers)
Groundsel (common)	Green foxtail (1-5 leaf)
Hemp-nettle	
Lamb's-quarters	
Narrow-leaved hawk's beard	
Night-flowering catchfly	
Redroot Pigweed	
Round-leaved Mallow (up to 6 leaf stage, < 10 cm in size)	
Russian thistle	
Shepherd's purse (up to 30 cm tall)	
Stinkweed (up to 30 cm tall)	
Stork's bill (2-6 leaf)	
Tartary Buckwheat	
Volunteer Canola (1-6 leaf) <sup>2</sup>	
Volunteer sunflower <sup>3</sup>	
Wild Buckwheat <sup>4</sup>	
Wild mustard	

BROADLEAF WEEDS SUPPRESSED	
Canada thistle (top growth control) <sup>5</sup>	
Dandelion (seedlings and over-wintered rosettes less than or equal to 20 cm diameter).	
Perennial sow thistle (top growth control) 5	
Scentless chamomile	
Toadflax <sup>6</sup>	

Notes:

- 1. Apply when chickweed is small (up to 10 cm) and actively growing, but before crop canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.
- 2. CS-100-31155 Herbicide alone will not control imazethapyr tolerant canola varieties (e.g. Clearfield\* varieties or other varieties with the Pursuit Smart\* trait)
- 3. CS-100-31155 Herbicide alone will not control volunteer sunflowers with the ExpressSun™ trait.
- 4. Apply to actively growing wild buckwheat in the cotyledon to 5-leaf stage. Under environmental stress, such as dry weather, control may be reduced. Large plants may regrow after treatment.
- 5. Apply when the majority of thistles have emerged and are actively growing. For best suppression of top growth, apply before bud stage when Canada thistles are no larger than 30 cm in height, and when perennial sow thistles are no larger than 15 cm in height, and before crop canopy prevents thorough coverage of weeds. A single application will effectively inhibit the ability of emerged thistles to compete with the crop. Later emerging thistles will not be suppressed.
- 6. Apply to toadflax that is no larger than 15 cm in height. A control program for this weed includes both frequent tillage and chemical application.

CS-100-31155 HERBICIDE + MCPA ESTER			
LOCATION: For use in the Prairie Provinces and the interior of British Columbia only.			
CROP (S): Spring wheat and durum wheat			
TIMING: Post-emergent application from full 3-leaf to just before flag leaf (shot blade) growth			
stage of crop.			
TANK MIX COMPONENTS AND APPLICATION RATES			
CS-100-31155 Herbicide	102.5 grams/hectare		
MCPA Ester 500	0.56 L/ha		
Or	Or		
MCPA Ester 600	0.47 L/ha		
MIXING: Ensure that CS-100-31155 Herbicide is dissolved before adding MPCA Ester. Then add			
MCPA Ester while continuing agitation. Refer to MIXING DIRECTIONS section for general			
directions. If antifoam agent is required, add last. Consult the MCPA Ester label for additional			
application instructions and use precautions.			

#### Weeds Controlled

Weeds controlled or suppressed by CS-100-31155 Herbicide alone plus control of: -Annual sowthistle

-Dandelion (spring and fall rosettes, less than 15 cm in diameter)

-Volunteer imazethapyr tolerant canola varieties (e.g. Clearfield\* canola or other varieties with the Pursuit\* Smart trait). Apply when volunteer canola is in the 1-6 leaf stage.

TANKMIXES: 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. The user should contact FMC at 1-833-362-7722 for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by FMC.

When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

## **MIXING INFORMATION:**

## **MIXING PRECAUTIONS:**

If the sprayer has been left standing for a period of time agitate thoroughly to re-suspend the tank mix partner before resuming spraying. Spray preparation should be used within 24 hours or product degradation may occur.

## MIXING DIRECTIONS:

Select a spray volume that will ensure thorough coverage and a uniform spray pattern. Use a minimum of 55 L of spray volume per hectare for ground application. If tank mixing with other herbicides, always consult the label of the tank mix partner(s) for minimum spray volume requirements and apply the tank mixture using a water volume recommended for all products.

- 1. Always start with a clean and empty sprayer tank.
- 2. Fill the tank to 2/3 full of **clean** water.
- 3. With the agitator running, add the required amount of CS-100-31155 Herbicide. Continue to agitate for a minimum of 5 minutes to ensure that CS-100-31155 Herbicide is **completely** dispersed.
- 4. Make sure there are no un-dissolved granules, and then add the rest of the water.
- 5. Add the non-ionic surfactant at 0.25% v/v (0.25 L per 100 L of spray solution). If an antifoam agent is required, add last.
- 6. 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 CS-100-31155 Herbicide granules from completely dissolving or dispersing.

## SPECIAL MIXING INSTRUCTIONS FOR CHEMICAL HANDLERS

- 1. Ensure the chemical handler is clean (rinsed with ammonia).
- 2. For best results, add CS-100-31155 Herbicide to the top of the sprayer tank.

- 3. If a chemical handler is used, make sure that all of the granules of CS-100-31155 Herbicide are completely dispersed and injected into the main tank with agitation before adding other chemicals.
- 4. Low water volumes in some chemical handlers can cause the water to become saturated with CS-100-31155 Herbicide, leaving un-dissolved granules. In that case, rinse the chemical handler with clean water before adding any other chemical.
- 5. Always dissolve the CS-100-31155 Herbicide granules with agitation in the main tank before adding a tank mix partner.

NOTE: Follow the clean-out procedure recommended for sprayer tanks for the chemical handler.

## **EQUIPMENT CLEANING INFORMATION:**

## CLEANING PRECAUTIONS:

CAUTION: Do not use 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 SPRAYER NEAR WELL OR WATER SOURCE OR NEAR TO DESIRABLE VEGETATION.

## CLEANING INSTRUCTIONS:

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, 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).
- 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.

## **RESISTANCE-MANAGEMENT RECOMMENDATIONS:**

For resistance management, please note that CS-100-31155 Herbicide is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to CS-100-31155 Herbicide and other Group 2 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 CS-100-31155 Herbicide or other Group 2 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 weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area if possible by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact your local FMC representative or the FMC at 1-833-362-7722 for further information.

#### 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.

Registered trademark of FMC Corporation or an affiliate. \* All other products mentioned are trademarks of their respective companies.