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| GROUP | 14 | HERBICIDE |
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PJ997 Herbicide

Wettable Granule

COMMERCIAL

For control of labelled weeds in fallow systems and pre-plant/pre-emergence and post-harvest burndown.

ACTIVE INGREDIENT: Carfentrazone-ethyl.....40%
Warning, contains the allergen sulfites

REGISTRATION NUMBER 34140 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND ACCOMPANYING BOOKLET BEFORE USING

KEEP OUT OF THE REACH OF CHILDREN

CAUTION – EYE IRRITANT

NET CONTENTS: 22 g - bulk

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

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.

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN.

HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS

May irritate eyes. Avoid contact with eyes, skin or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes and a NIOSH-approved N95 (minimum) filtering facepiece respirator (dust mask) that is properly fit tested 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 PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

DO NOT apply by air.

TOXIC to non-target terrestrial plants and aquatic plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

See booklet for full user precautions and restrictions.

FIRST AID

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 IMMEDIATELY for further treatment advice.

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

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 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 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 the poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

You may also call 1-800-331-3148 for emergency medical treatment information.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

STORAGE

Not for use or storage in or around the home. Store in original containers only. Store in a cool, dry place. Store this product away from food or feed. In case of spill, avoid contact, isolate area and keep out unprotected persons and animals. Confine spills. Call FMC: 1-800-331-3148.

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

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

Returnable Containers:

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

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.

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

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| IN CASE OF EMERGENCY, CALL 1-800-331-3148 (24 HOURS). |
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GENERAL INFORMATION

SECTION 1: NOTICE TO USER

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

SECTION 2: PRODUCT INFORMATION

PJ997 Herbicide is to be mixed with water and listed adjuvants and applied to labelled crops or sites.

PJ997 Herbicide used as directed will provide selective control of emerged broadleaf weeds when applied pre-plant or pre-emergence to the crop or to fallow systems.

Weed control is optimized when the product is applied to actively growing weeds up to 10 cm in height, or as specified. PJ997 Herbicide is a contact herbicide. Within a few hours following application, the foliage of susceptible weeds shows signs of desiccation, and in subsequent days, necrosis and death of the plant occur.

Extremes in environmental conditions such as temperature, moisture, soil conditions, and cultural practices may affect the activity of PJ997 Herbicide. Under warm moist conditions, herbicide symptoms may be accelerated. While under very dry conditions, the expression of herbicide symptoms may be reduced as weeds hardened off by drought are less susceptible to PJ997 Herbicide.

PJ997 Herbicide is rapidly absorbed through the foliage of plants.

SAFETY AND HANDLING

SECTION 3: PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN.

HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS

May irritate eyes. Avoid contact with eyes, skin or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes and a NIOSH-approved N95 (minimum) filtering facepiece respirator (dust mask) that is properly fit tested 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 PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

DO NOT apply by air.

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

RESTRICTED-ENTRY INTERVAL

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

SECTION 4: ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic plants and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

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

SECTION 5: FIRST AID AND TOXICOLOGICAL INFORMATION

FIRST AID

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 IMMEDIATELY for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control centre or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 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 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 the poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

You may also call 1-800-331-3148 for emergency medical treatment information.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

SECTION 6: STORAGE

Not for use or storage in or around the home. Store in original containers only. Store in a cool, dry place. Store this product away from food or feed. In case of spill, avoid contact, isolate area and keep out unprotected persons and animals. Confine spills. Call FMC: 1-800-331-3148.

SECTION 7: 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-rinse or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

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

Returnable Containers:

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

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.

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

DIRECTIONS FOR USE

PJ997 Herbicide, or other products containing carfentrazone-ethyl, can be applied up to two times per growing season, such that a pre-plant or pre-emergence application can be followed by a post-harvest application in the same year. Maximum two applications per year.

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.

SECTION 8: WEEDS AND CROP USES

SECTION 8.1: WEEDS CONTROLLED

When used as directed, PJ997 Herbicide will provide control of the listed weeds up to ten (10) cm in height, or as specified.

| Weeds Controlled | PJ997 Herbicide Use Rate g product/ha |
|--|--|
| Lamb's-quarters, common (up to 7.5 cm tall) | 22 |
| Morning glory (up to 3 leaves) | |
| Nightshade, black (up to 5 cm tall) | |
| Nightshade, Eastern black (up to 5 cm tall) | |
| Pigweed, redroot | |
| Velvetleaf | |
| Waterhemp, tall and common (up to 5 cm tall) | |
| All the weeds controlled at 22 g/ha plus the weeds listed below: | 35 |
| Flixweed | |
| Lamb's-quarters, common | |
| Mallow, round-leaved | |
| Morning glory | |
| Nightshade, hairy | |
| Pennycress, field (stinkweed) | |
| Pigweed, prostrate | |
| Pigweed, smooth | |
| Pigweed, tumble | |
| Purslane, common | |
| Smartweed, Pennsylvania (seedling) | |
| Mustard, tansy | |
| Waterhemp, tall and common | |
| All the weeds controlled at 35 g/ha plus the weeds listed below: | 45 |
| Carpetweed | |
| Cleavers | |
| Cocklebur | |
| Jimsonweed | |
| Kochia | |
| Nightshade, black | |
| Nightshade, Eastern black | |
| Thistle, Russian (up to 5 cm tall) | |
| Shepherd's purse | |
| Canola, volunteer, including glyphosate-tolerant | |
| All the weeds controlled at 45 g/ha plus the weeds listed below: | 70 |
| Burclover | |
| Lettuce, prickly | |
| Mallow, Venice (up to 5 cm tall) | |
| Spurry, corn | |

SECTION 8.2: PRE-PLANT/PRE-EMERGENCE AND POST-HARVEST BURNDOWN AND FALLOW SYSTEMS

PRE-PLANT/PRE-EMERGENCE BURNDOWN

PJ997 Herbicide may be used for preplant or pre-emergence burndown applications in the crops listed below:

Crop Group 6: Legume Vegetable (Succulent or dried): bean (*Lupinus* spp.) (includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean (*Phaseolus* spp.) (includes field bean, kidney bean, lima bean (dry), navy bean, pinto bean, runner bean, snap bean, tepary bean, and wax bean); bean (*Vigna* spp.) (includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, and yardlong bean); broad bean (faba bean); chickpea; guar; jackbean; lablab bean; lentil; pea (*Pisum* spp.) (includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, and sugar snap pea); pigeon pea; soybean (immature seed); soybean; and sword bean.

Crop Group 15: Cereal Grains: barley; buckwheat; corn (includes sweet corn and field corn); millet, pearl; millet, proso; oats; popcorn; rice; rye; sorghum; teosinte; triticale; wheat; and wild rice.

Crop Subgroup 20A: Rapeseeds: borage; crambe; cuphea; echium; flax seed; gold of pleasure (camelina); hare's ear mustard; lesquerella; lunaria; meadowfoam; milkweed; mustard seed; oil radish; poppy seed; rapeseed (canola); sesame; and sweet rocket.

Crop Subgroup 20B: Sunflowers: calendula; castor oil plant; Chinese tallowtree; Euphorbia; evening primrose; jojoba; niger seed; rose hip; safflower; sunflower; tallowwood; tea oil plant; and vernonia.

POST-HARVEST BURNDOWN

PJ997 Herbicide can be applied after harvest to control actively growing emerged weeds. A post-harvest application can be applied to fields treated with a pre-plant or pre-emergence application of PJ997 Herbicide in the same year.

All crops listed on this label may be planted the following spring after post-harvest application. All other crops may be planted after 12 months.

FALLOW SYSTEMS

PJ997 Herbicide may be utilized in fallow cropping systems.

PJ997 HERBICIDE USE RATES FOR PRE-PLANT/PRE-EMERGENCE AND POST-HARVEST BURNDOWN AND FALLOW SYSTEMS

Apply PJ997 Herbicide for pre-plant/pre-emergence and post-harvest burndown and fallow systems at up to 70 g product/ha except for sorghum where PJ997 Herbicide may be applied for pre-plant/pre-emergence burndown at up to 45 g product/ha. For optimum performance, make application to actively growing weeds up to 10 cm high, or as specified. **Coverage of the weeds is essential for good control.**

ADJUVANT RECOMMENDATIONS FOR PRE-PLANT/PRE-EMERGENCE AND POST-HARVEST BURNDOWN AND FALLOW SYSTEMS

When using PJ997 Herbicide alone, use a non-ionic surfactant at 0.25% v/v (0.25 litres per 100 litres of spray solution) or use Merge® at 1% v/v (1 litre per 100 litres of spray solution).

PJ997 HERBICIDE PLUS GLYPHOSATE

Apply PJ997 Herbicide at 22 - 45 g product/ha in combination with registered glyphosate products at 450 - 900 g ae/ha.

Use a minimum of 100 L/ha water and ensure good coverage for maximum performance.

This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table:

| Rate of Glyphosate | Weeds controlled |
|------------------------------|---|
| 450 g ae/ha ¹ | Green foxtail |
| | Lady's thumb |
| | Volunteer barley |
| | Volunteer wheat |
| | Wild mustard |
| | Wild oats |
| 450-685 g ae/ha ¹ | Weeds controlled by the 450 g ae/ha rate plus: |
| | Canada fleabane (less than 8 cm in height) |
| | Common ragweed (less than 8 cm in height) |
| | Downy brome |
| | Giant foxtail |
| | Hemp nettle |
| | Persian darnel |
| | Volunteer flax |
| | Narrow-leaved hawk's beard ² |
| Wild buckwheat ³ | |
| 810 g ae/ha ¹ | Weeds controlled by the 450-685 g ae/ha rate plus: |
| | Annual bluegrass |
| | Annual sow thistle |
| | Crab grass |
| | Narrow-leaved vetch |
| | Prickly lettuce |
| 900 g ae/ha ¹ | Weeds controlled by the 810 g ae/ha rate plus: |
| | Canada thistle (rosette stage; summerfallow) |
| | Dandelion (less than 15 cm) |
| | Quackgrass (light to moderate infestations, 3-4 green leaves or more) |

¹Weeds up to 15 cm in height are controlled by this rate unless otherwise specified

² Narrow-leaved hawk's-beard use 450 g ae/ha if less than 8cm in height or 685 g ae/ha if 8-15 cm

³ Wild buckwheat use 450 g ae/ha if less than 3 leaves or 685 g ae/ha if 3-4 leaf stage

PJ997 HERBICIDE PLUS 2,4-D ESTER

Apply PJ997 Herbicide at 22 – 45 g product/ha in combination with registered 2,4-D Ester products at 330 - 528 g ae/ha.

Use a minimum of 100 L/ha water and ensure good coverage for maximum performance.

This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table:

| Rate of 2,4-D Ester | Weeds controlled |
|------------------------------|---|
| 330-528 g ae/ha ¹ | Annual sow thistle |
| | Bluebur (before the 4-leaf stage) |
| | Burdock (before the 4-leaf stage) |
| | Common ragweed |
| | Daisy fleabane |
| | False flax |
| | False ragweed |
| | Giant ragweed |
| | Goat's beard |
| | Horsetail |
| | Mustards (except dog mustard) |
| | Narrow-leaved hawk's beard (1-2 leaf stage) |
| | Plantain |
| | Prickly lettuce |
| | Russian pigweed |
| | Stinging nettle |
| | Sweet clover (seedling) |
| | Thyme-leaved spurge |
| Wild buckwheat | |
| Wild radish | |
| Wild (prairie) sunflower | |

¹Weeds less 8 cm tall and actively growing.

PJ997 HERBICIDE PLUS PYROXASULFONE 85WG FOR GLYPHOSATE TOLERANT CORN AND SOYBEANS

Apply PJ997 Herbicide at 22 – 45 g product/ha in combination with Pyroxasulfone 85 WG Herbicide at 118 g product/ha for early season control of certain weeds. A planned in-crop application of glyphosate should follow this use for season long control.

Use a minimum of 100 L/ha water and ensure good coverage for maximum performance.

This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table.

| Rate of Pyroxasulfone 85WG | Weeds controlled |
|----------------------------|------------------|
| 118 g/ha ¹ | Barnyard grass |
| | Common ragweed |
| | Downy brome |
| | Giant foxtail |
| | Green foxtail |
| | Green pigweed |
| | Italian ryegrass |
| | Japanese brome |
| | Large crabgrass |

| Rate of Pyroxasulfone 85WG | Weeds controlled |
|-------------------------------|------------------------------|
| | Yellow foxtail |
| | Wild oats (suppression) |
| | Wild buckwheat (suppression) |

¹This rate provides early season control only. An in-crop application of glyphosate will be needed for season long control.

PJ997 HERBICIDE PLUS BROMOXYNIL CONTAINING PRODUCTS FOR BURNDOWN CONTROL OF VOLUNTEER CANOLA (ALL TYPES)

Apply PJ997 Herbicide at 22 – 45 g product/ha in combination with listed bromoxynil products at 140 g ai/ha. Registered glyphosate products can be added to this tank mix at 450-900 g ae/ha.

PJ997 Herbicide plus bromoxynil products will control volunteer canola (all types including Liberty Link, Clearfield, and Roundup Ready) from cotyledon stage up to the 4-leaf stage.

Use a minimum of 100 L/ha water and ensure good coverage for maximum performance.

No adjuvant required when using this tank-mix with glyphosate.

See table below for rates of bromoxynil containing products based on concentration:

| Products | Rate/Hectare |
|--|--------------|
| 235 g/L NuFarm Koril® 235 or Bromotril II 240 EC | 600 mL |
| 240 g/L IPCO Brotex® 240 or Bromotril 240 EC | 584 mL |
| 480 g/L IPCO Brotex® 480 or Brotex® 4AT | 292 mL |

PJ997 HERBICIDE PLUS EXPRESS® SG HERBICIDE OR NC-0050 HERBICIDE PLUS GLYPHOSATE

For control of broadleaf weeds and grasses in fallow, post-harvest or pre-seed to spring wheat (including durum), winter wheat, spring barley, oats and pulse crops (including dry bean, faba bean, field pea, lupin and soybean).

With any chemfallow or post-harvest treatment, allow at least 10 days to elapse between treatment and tillage. Only weeds emerged at time of application will be controlled.

Fields treated with this tank mix can be seeded to spring wheat (including durum), winter wheat, spring barley, oats or pulse crops (including, dry bean, faba bean, field pea, lupin and soybean) a minimum of 24 hours after application. These same crops, as well as canola, chickpeas, corn, flax and lentils can be planted in the spring following a post-harvest application of this tank mix.

For pre-seed applications in the spring, injury to pulse crops may occur on coarse-textured soils, low in organic matter (less than 3%), or in fields with variable soils, gravelly areas, sandy areas or eroded knolls. Avoid planting pulse crops in soils containing more than 50% sand.

Apply PJ997 Herbicide at a rate of 22 – 70 g product/ha with EXPRESS® SG Herbicide or NC-0050 Herbicide at a rate of 15 g product/ha, tank mixed with glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) at a rate of 450-810 g ae/ha in a total spray volume of 100 L/ha. This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table.

| Tank Mix Partners | Application Rate | Application Stage | Weeds Controlled | Weeds Suppressed* |
|---|---------------------------------|-----------------------------|--|------------------------------|
| EXPRESS® SG Herbicide or NC-0050 Herbicide + Glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) | 15 g/ha + 450 g ae/ha | Up to 8 cm | Canada fleabane, common ragweed, narrow leaved hawk's beard | Scentless chamomile |
| | | Up to 10 cm | | Wild carrot |
| | | Up to 15 cm | Dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp nettle, kochia, lady's thumb, lamb's-quarters, Persian dandelion, redroot pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola (including glyphosate-tolerant varieties), volunteer flax, volunteer wheat, wild mustard, wild oats | Tufted vetch |
| | | Up to 3-leaf | Cow cockle, wild buckwheat | |
| | | Up to 8-leaf | Common chickweed | |
| | | Rosette | | Canada thistle, White cockle |
| EXPRESS® SG Herbicide or NC-0050 Herbicide + | 15 g/ha + 810 g ae/ha | Weeds up to 15 cm in height | All annual grasses listed above plus crab grass (large and smooth) and annual bluegrass. | |

| Tank Mix Partners | Application Rate | Application Stage | Weeds Controlled | Weeds Suppressed* |
|--|------------------|-------------------|--|-------------------|
| Glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) | | | All annual broadleaf weeds listed above plus prickly lettuce, shepherd's purse, annual sow thistle and narrow-leaved vetch | |

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

PJ997 HERBICIDE PLUS EXPRESS® FX HERBICIDE OR DB-878 HERBICIDE PLUS GLYPHOSATE

For use prior to seeding wheat (spring, durum and winter), spring barley and oats and for chemfallow and post-harvest applications.

With any chemfallow or post-harvest treatment allow at least 10 days to elapse between treatment and tillage. Only weeds emerged at time of application will be controlled.

Treated fields can be seeded to wheat (spring, durum and winter), spring barley or oats a minimum of 24 hours after application.

Fields treated with a post-harvest application of this tank mix in the fall may be seeded in spring to canola, corn, lentils, oats, spring barley, soybeans, wheat (spring or durum) or white beans.

Apply PJ997 Herbicide at a rate of 22 – 70 g product/ha with EXPRESS® FX Herbicide or DB-878 Herbicide at a rate of 115 g product/ha, tank mixed with glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) at a rate of 450-810 g ae/ha in a total spray volume of 100 L/ha. This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table.

| Tank Mix Partners | Application Rate | Application Stage | Weeds Controlled | Weeds Suppressed* |
|---|----------------------------------|--------------------------|---|------------------------------|
| EXPRESS® FX Herbicide or DB-878 Herbicide + Glyphosate (present as potassium salt, isopropylamine salt, or ammonium salt) | 115 g/ha + 450 g ae/ha | Up to 8 cm | Canada fleabane, common ragweed, kochia (including Group 2 and Group 9 resistant biotypes), narrow leaved hawk's beard | Scentless chamomile |
| | | Up to 10 cm | | Wild carrot |
| | | Up to 15 cm | Cleavers, dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp nettle, lady's thumb, lamb's-quarters, Persian darnel, redroot pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola (including glyphosate-tolerant varieties), volunteer flax, volunteer wheat, wild mustard, wild oats | Tufted vetch |
| | | Up to 3-leaf | Cow cockle | |
| | | Up to 8-leaf | Common chickweed, Wild buckwheat | |
| | | Rosette | | Canada thistle, white cockle |
| | | | | |

| Tank Mix Partners | Application Rate | Application Stage | Weeds Controlled | Weeds Suppressed* |
|--|---------------------------------|-----------------------------------|--|-------------------|
| EXPRESS® FX Herbicide or DB-878 Herbicide + Glyphosate (present as potassium salt, isopropylamine salt, ammonium salt | 15 g/ha + 810 g ae/ha | Weeds up to 15 cm in height | All annual grasses listed above plus crab grass (large and smooth) and annual blue grass All annual broadleaf weeds listed above plus prickly lettuce, shepherd's purse, annual sow thistle and narrow-leaved vetch. | |

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

NOTE: If rain occurs soon after application control may be reduced. Environmental conditions that slow the drying of the spray mixture on the foliage such as high relative humidity, cool air temperatures or cloud cover, may increase the time required for absorption.

PJ997 HERBICIDE PLUS EXPRESS® PRO HERBICIDE OR NC-00439 HERBICIDE PLUS GLYPHOSATE

For use prior to seeding wheat (spring, durum and winter) and spring barley and for chemfallow and post-harvest applications.

With any chemfallow or post-harvest treatment, allow at least 10 days to elapse between treatment and tillage. Only weeds emerged at time of application will be controlled.

Treated fields can be seeded to wheat (spring, durum and winter) or spring barley a minimum of 24 hours after application.

Fields treated with a post-harvest application of this tank mix in the fall may be seeded in the spring to wheat (spring or durum), spring barley or oats, or fields may be summerfallowed.

Apply PJ997 Herbicide at a rate of 22 – 70 g product/ha with EXPRESS® PRO Herbicide or NC-00439 Herbicide at a rate of 17.5 g product/ha, tank mixed with glyphosate (present as potassium salt, isopropylamine salt or ammonium salt) at a rate of 450 g ae/ha in a total spray volume of 100 L/ha. This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table.

| Tank Mix Partners | Application Rate | Application Stage | Weeds Controlled | Weeds Suppressed * |
|--|-----------------------------------|-------------------|--|--------------------------------|
| EXPRESS® PRO Herbicide or NC-00439 Herbicide + | 17.5 g/ha + 450 g ae/ha | Up to 8 cm | Canada fleabane, cleavers ^R , common ragweed, narrow-leaved hawk's beard ^R , scentless chamomile | Night flowering catchfly |

| Tank Mix Partners | Application Rate | Application Stage | Weeds Controlled | Weeds Suppressed * |
|---|------------------|-------------------|--|--------------------|
| Glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) | | | | |
| | | 1-6 leaf | Chickweed | |
| | | Up to 15 cm | Dandelion ^R , downy brome, flixweed, giant foxtail, green foxtail, hemp nettle, kochia, lady's thumb, lamb's-quarters, Persian darnel, redroot pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola ^R (including glyphosate-tolerant varieties), volunteer flax, volunteer wheat, wild mustard, wild oats | |
| | | Up to 3-leaf | Cow cockle, wild buckwheat | |
| | | Rosette | White cockle | Canada thistle |

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

^RResidual control. Degree and duration of residual control will depend on environmental conditions at and following treatment and weed infestation levels.

PJ997 HERBICIDE PLUS COMMAND® 360ME

For use as part of an integrated approach for the control of weeds in herbicide-tolerant canola varieties, and oilseed mustard (brown, Oriental, yellow). Application of a post emergence herbicide (e.g., a herbicide to which the canola or mustard variety is tolerant) is recommended.

Apply as a single, soil-applied application prior to seeding canola or mustard.

Apply in a minimum of 100 L of water per hectare.

Do not incorporate.

Do not apply to sandy soil. Control may be reduced in high organic matter soils.

This tank mix requires the addition of a non-ionic surfactant at 0.25% v/v (0.25 litres per 100 litres of spray solution) or use Merge at 1% v/v (1 litre per 100 litres of spray solution).

Apply PJ997 Herbicide at 22 – 70 g product/ha with COMMAND 360ME at 0.25 – 0.33 L/ha for herbicide tolerant canola varieties and 0.25 L/ha for mustard in a total spray volume of 100 L/ha. This tank mix will control emerged weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, and will provide residual, early season control of cleavers as well as those listed in the following table.

| Tank Mix Partner | Crop | Application Rate | Application Stage | Weeds Controlled/ Suppressed ² |
|-------------------|---|------------------|--|--|
| COMMAND® 360ME | Herbicide-tolerant canola, Oilseed mustard | 0.25 L/ha | Apply as a single, soil-applied application prior to seeding | Cleavers (early season suppression) Common chickweed (suppression) ¹ |
| | Herbicide-tolerant canola | 0.33 L/ha | | Cleavers (early season control) Common chickweed (suppression) ¹ |

¹Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.

Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.

PJ997 HERBICIDE PLUS COMMAND® 360ME PLUS GLYPHOSATE

For use as part of an integrated approach for the control of weeds in herbicide-tolerant canola varieties and oilseed mustard (brown, Oriental, yellow). Application of a post emergence herbicide (e.g., a herbicide to which the canola or mustard variety is tolerant) is recommended.

Apply as a single, soil-applied application prior to seeding. An adjuvant is not required for this tank-mix.

Apply in a minimum of 100 L of water per hectare.

Do not incorporate the tank mix.

Do not apply to sandy soil. Control may be reduced in high organic matter soils.

Apply PJ997 Herbicide at 22 – 70 g product/ha with COMMAND 360ME at 0.25 L/ha for mustard or 0.25 – 0.33 L/ha for herbicide tolerant canola varieties and glyphosate at 450 – 900 g ae/ha in a total spray volume of 100 L/ha. This tank mix will control emerged weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, and will provide residual, early season control of cleavers as well as those listed in the following table.

| Tank Mix Partner | Crop | Application Rate | Application Stage | Weeds Controlled | Weeds Suppressed ² |
|--------------------------------------|---------------------------|---|---|--|---|
| COMMAND® 360ME + Glyphosate | Oilseed mustard | 0.25 L/ha + 450 g ae/ha ¹ | Apply as a single, soil-applied application prior to seeding canola | Barley, volunteer Foxtail, green Lady's thumb Mustard, wild Oats, wild Wheat, volunteer | Cleavers (early-season suppression) Common chickweed (suppression) |
| | Herbicide-tolerant canola | 0.33 L/ha + 450 g ae/ha ¹ | | Weeds controlled above plus: Cleavers (early-season control) | Common chickweed (suppression) |
| | Herbicide-tolerant canola | 0.25 – 0.33 L/ha + 450 - 685 g ae/ha ¹ | | Weeds controlled above plus: Brome, downy Buckwheat, wild ³ Darnel, Persian Flax, volunteer Fleabane, Canada (less than 8 cm in height) Foxtail, giant Hemp nettle Narrow-leaved hawk's beard ⁴ Ragweed, common (less than 8 cm in height) | Weeds suppressed above |
| | | 0.25 – 0.33 L/ha + 810 g ae/ha ¹ | | Weeds controlled above plus: Bluegrass, annual Crab grass Narrow-leaved vetch Prickly lettuce Sowthiste, annual | Weeds suppressed above |
| | | 0.25 – 0.33 L/ha + 900 g ae/ha ¹ | | Weeds controlled above plus: Dandelion (less than 15 cm) Quackgrass (light to moderate infestations, 3-4 green leaves or more) | Weeds suppressed above |

¹Weeds up to 15 cm in height are controlled by this rate unless otherwise specified

²Suppression is a visual reduction in weed competition (reduced population and/or vigor) as compared to an untreated area. Competition by weeds listed as suppressed that remain in a crop will vary depending

upon factors such as crop competition, weed biotype, the number of weed seeds in the soil and the time of weed emergence relative to crop emergence.

³For wild buckwheat use 450 g ae/ha if less than 3 leaves or 685 g ae/ha if 3-4 leaf stage

⁴For narrow-leaved hawk's-beard use 450 g ae/ha if less than 8cm in height or 685 g ae/ha if 8-15 cm

Temporary whitening and/or yellowing of the crop may occur when emerging from the treated soil. Susceptible weed species may emerge from the soil but are devoid of pigmentation and plant death occurs in a short period of time.

PJ997 HERBICIDE PLUS AUTHORITY® 480 HERBICIDE

For control or suppression of weeds in chickpeas, field peas, fababean, flax, sunflowers, soybeans, mustard and wheat (spring and durum).

This tank mix requires the addition of a non-ionic surfactant at 0.25% v/v (0.25 litres per 100 litres of spray solution) or use Merge at 1% v/v (1 litre per 100 litres of spray solution).

Apply as a single, soil-applied application prior to seeding or pre-emergence up to 3 days after seeding. This tank mix can be applied once every other year (one application per 24-month period).

Do not incorporate after seeding.

Apply in a minimum of 100 L of water per hectare.

Apply PJ997 Herbicide at 22 – 70 g product/ha with AUTHORITY® 480 Herbicide at a rate of 219 (for mustard and spring and durum wheat) or 219-292 mL/ha (for chickpeas, field peas, faba bean, flax, sunflowers and soybean). This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied. This tank mix will also provide extended control of weeds listed in the following table.

| Tank Mix Partner | Crops | Application Rate | Weeds Controlled | Weeds Suppressed |
|-----------------------------|---|-------------------------|--|-------------------------------|
| AUTHORITY® 480 Herbicide | Chickpeas, field peas, fababeans, flax, sunflowers, soybeans, mustard, wheat (spring and durum) | 219 mL/ha | Kochia | Russian thistle (suppression) |
| | Chickpeas, field peas, fababeans, flax, sunflowers, soybeans | 292 mL/ha | Above weeds plus: Common groundsel Common purslane Common and tall waterhemp Eastern black nightshade Lamb's-quarters Large crabgrass Powell pigweed Redroot pigweed | Above weeds plus: Cleavers |

| Tank Mix Partner | Crops | Application Rate | Weeds Controlled | Weeds Suppressed |
|------------------|-------|------------------|---|------------------|
| | | | Smooth crabgrass Wild buckwheat Yellow woodsorrel | |

Do not apply to soils classified as coarse-textured soils.

Do not apply in fine textured soils with less than 1.5% organic matter.

Do not use on peat or muck soils.

Do not apply on any type of soils with an organic matter content greater than 6%.

Do not use on soils with a pH of 7.8 or greater.

Authority 480 Herbicide does not control emerged weeds at the time of application.

PJ997 HERBICIDE PLUS AUTHORITY® SUPREME HERBICIDE

For control of weeds in chickpeas, field peas, soybeans and sunflowers.

This tank mix requires the addition of a non-ionic surfactant at 0.25% v/v (0.25 litres per 100 litres of spray solution) or use Merge at 1% v/v (1 litre per 100 litres of spray solution).

Apply as a single, soil-applied application prior to seeding or pre-emergence up to 3 days after seeding. This tank mix can be applied once every other year (one application per 24-month period).

Do not incorporate after seeding.

Apply in a minimum of 100 L of water per hectare.

Apply PJ997 Herbicide at 22 – 70 g product/ha with AUTHORITY® SUPREME Herbicide at a rate of 400 - 600 mL/ha (see table below). This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied. This tank mix will also provide extended control of the weeds listed in the following table.

| Tank Mix Partner | Application Timing | Application Rate | Weeds Controlled |
|------------------------------------|--|--|---|
| AUTHORITY® SUPREME Herbicide | Setup Treatment* (pre-plant or pre-emergence) | 400 ml/ha (early season control only) | Barnyard grass Brome (downy, Japanese) Cleavers Crabgrass (large, smooth) Cow cockle |
| | Residual Treatment (pre- plant or pre- emergence) | 500 ml/ha (medium texture, O.M. 1 – 3%) 600 ml/ha (medium- fine/fine texture, O.M. 3 - 6%) | Foxtail (green, yellow, giant) Groundsel (common) Kochia Lamb's-quarters Nightshade, Eastern black Pigweed (green, redroot, Powell) Purslane (common) Ragweed (common)** Stinkweed Waterhemp (common and tall) |

| Tank Mix Partner | Application Timing | Application Rate | Weeds Controlled |
|------------------|--------------------|------------------|---|
| | | | Wild buckwheat Wild mustard** Wild oats** Witchgrass Woodsorrel, yellow |

*A set-up treatment is an application to remove early weed competition to allow good crop establishment.

**Suppression

Do not apply to soils classified as coarse-textured soils.

Do not apply in fine textured soils with less than 1.5% organic matter.

Do not use on peat or muck soils.

Do not apply on any type of soils with an organic matter content greater than 6%.

Do not use on soils with a pH of 7.8 or greater.

Authority Supreme Herbicide does not control emerged weeds at the time of application.

PJ997 HERBICIDE PLUS SZ-75 HERBICIDE

For extended control or suppression of certain weed species in chickpeas, faba beans, field peas, flax, soybeans, sunflowers and wheat (spring and durum), PJ997 Herbicide can be tank mixed with SZ-75 Herbicide at 140 g product/ha.

This tank mix can be applied pre-plant or pre-emergence once every other year (one application per 24-month period).

Apply in a minimum of 100 L of water per hectare.

This tank mix requires the addition of Agral® 90 or Ag-Surf® at 0.25% v/v (0.25 litres per 100 litres of spray solution) or use Merge at 1% v/v (1 litre per 100 litres of spray solution).

This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as provide extended control of those listed in the following table.

| Use rate of SZ-75 Herbicide | Weeds controlled | Weeds suppressed |
|-----------------------------|--|------------------------------|
| 140 g product/ha | Kochia (including Group 2 and Group 9 resistant biotypes) ¹ | Russian thistle ¹ |

¹Extended control or suppression.

Do not apply to soils classified as coarse-textured soils.

Do not apply in fine textured soils with less than 1.5% organic matter.

Do not use on peat or muck soils.

Do not use on any type of soils with an organic matter content greater than 6%.

Do not use on soils with a pH of 7.8 or greater.

PJ997 HERBICIDE PLUS SZ-75 HERBICIDE PLUS GLYPHOSATE

To control a broader spectrum of emerged weeds and to obtain extended control or suppression of certain weed species in chickpeas, faba beans, field peas, flax, soybeans, sunflowers and wheat (spring and durum), PJ997 Herbicide can be tank mixed with SZ-75 Herbicide at 140 g product/ha and glyphosate at 450 – 900 g ae/ha.

This tank mix can be applied pre-plant or pre-emergence once every other year (one application per 24-month period).

Apply in a minimum of 100 L of water per hectare.

An adjuvant is not required for this tank mix.

This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table.

| Tank mix Partner | Application Rate | Weeds controlled | Weeds suppressed |
|------------------------------|---|---|------------------------------|
| SZ-75 Herbicide + Glyphosate | 140 g product/ha + 450 g ae/ha ² | Kochia (including Group 2 and Group 9 resistant biotypes) ¹ Green foxtail Lady's thumb Volunteer barley Volunteer wheat Wild mustard Wild oats | Russian thistle ¹ |
| | 140 g product/ha + 450-685 g ae/ha ² | Weeds controlled above plus: Canada fleabane (less than 8 cm in height) Common ragweed (less than 8 cm in height) Downy brome Giant foxtail Hemp nettle | |

| Tank mix Partner | Application Rate | Weeds controlled | Weeds suppressed |
|------------------|---|--|------------------|
| | | Persian darnel Volunteer flax Narrow-leaved hawk's beard ³ Wild buckwheat ⁴ | |
| | 140 g product/ha + 810 g ae/ha ² | Weeds controlled above plus: Annual bluegrass Annual sowthistle Crab grass Narrow-leaved vetch Prickly lettuce | |
| | 140 g product/ha + 900 g ae/ha ² | Weeds controlled above plus: Canada thistle (rosette stage; summerfallow) Dandelion (less than 15 cm) Quackgrass (light to moderate infestations, 3-4 green leaves or more) | |

¹Extended control or suppression.

²Weeds up to 15 cm in height are controlled by this rate unless otherwise specified

³Narrow-leaved hawk's-beard: use 450 g ae/ha if less than 8cm in height or 685 g ae/ha if 8-15 cm

⁴Wild buckwheat: use 450 g ae/ha if less than 3 leaves or 685 g ae/ha if 3-4 leaf stage

Do not apply to soils classified as coarse-textured soils.

Do not apply in fine textured soils with less than 1.5% organic matter.

Do not use on peat or muck soils.

Do not use on any type of soils with an organic matter content greater than 6%.

Do not use on soils with a pH of 7.8 or greater.

PJ997 HERBICIDE PLUS SZ-0050 HERBICIDE PLUS GLYPHOSATE

To control a broader spectrum of emerged weeds and to obtain extended control or suppression of certain weed species, PJ997 Herbicide can be tank mixed with SZ-0050 Herbicide.

Treated fields can be seeded to faba bean, field pea, soybean or wheat (spring and durum) a minimum of 24 hours after application.

This tank mix can be applied preplant, once every other year.

An adjuvant is not required for this tank mix.

Apply PJ997 Herbicide at a rate of 22 – 70 g product/ha with SZ-0050 Herbicide at a rate of 155 g product/ha, tank mixed with glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) at a rate of 450 - 810 g ae/ha in a total spray volume of 100 L/ha. This tank mix will control weeds listed on this label, corresponding to the rate of PJ997 Herbicide applied, as well as those listed in the following table.

| Use Rate of SZ-0050 Herbicide | Use Rate of Glyphosate | Weed Application Stage | Weeds Controlled | Weeds Suppressed |
|-------------------------------|------------------------|------------------------|------------------|------------------|
|-------------------------------|------------------------|------------------------|------------------|------------------|

| | | | | |
|---------|-------------|--------------|---|----------------------|
| 155 g/L | 450 g ae/ha | Preemergent | Kochia (including Group 2 and Group 9 resistant biotypes) | Russian thistle |
| | | Up to 8 cm | Canada fleabane, common ragweed, kochia (including Group 2 and Group 9 resistant biotypes), narrow leaved hawk's beard | Scentsless chamomile |
| | | Up to 15 cm | Cleavers, dandelion, downy brome, flixweed, giant foxtail, green foxtail, hemp nettle, lady's thumb, lamb's-quarters, Persian darnel, redroot pigweed, Russian thistle, stinkweed, volunteer barley, volunteer canola (including glyphosate-tolerant varieties), volunteer flax, volunteer wheat, wild mustard, wild oats | |
| | | Up to 3-leaf | Cow cockle Wild buckwheat | |

| | | | | |
|---|-------------|-----------------------------|---|------------------------------|
| | | Up to 8-leaf Rosette | Common chickweed | |
| | 810 g ae/ha | Weeds up to 15 cm in height | All annual grasses listed above plus crab grass (large and smooth) and annual blue grass All annual broadleaf weeds listed above plus prickly lettuce, shepherd's purse, annual sow thistle and narrow-leaved vetch. | Canada thistle, white cockle |
| <p>Injury to pulse crops may occur on coarse-textured soils, low in organic matter (less than 3%), or in fields with variable soils, gravelly areas, sandy areas or eroded knolls. Avoid spraying SZ-0050 Herbicide when planting pulse crops in soils containing more than 50% sand.</p> <p>Make one pre-plant application every other year. Do not use on any type of soil with an organic matter content greater than 6%. Do not apply in fine textured soils with less than 1.5% organic matter. Do not apply to soils classified as coarse-textured soils. Do not use on soils with a pH of 7.8 or greater. Do not apply this tank mix (or any other product containing sulfentrazone) to spring wheat if an application of FOCUS® Herbicide (or any other product containing pyroxasulfone) was applied in the previous fall. Do not mix with Chateau® Herbicide (flumioxazin) or with other products containing sulfentrazone. Do not apply to fields treated with other products containing sulfentrazone in the current or previous year. Follow all directions on the SZ-0050 Herbicide and glyphosate product labels.</p> | | | | |

SECTION 9: APPLICATION INFORMATION

SECTION 9.1: GENERAL APPLICATION INSTRUCTIONS

GROUND APPLICATION

Use a boom and nozzle sprayer equipped with the appropriate nozzles, spray tips and screens adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Use nozzles that produce minimal amounts of fine spray droplets. Do not exceed 210 kPa spray pressure, unless otherwise required for optimal drift reduction nozzle performance. Apply in a minimum of 100 litres of spray volume per hectare. Use higher spray volumes when there is a dense weed population.

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR AND THE GROWER.

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target movement from applications to agricultural field crops.

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The optimum drift management strategy is to apply the largest droplets that provide sufficient coverage and performance. Applying larger droplets reduces drift potential but will not prevent drift when applications are made improperly, or under unfavourable environmental conditions. (See Wind, Temperature and Humidity, and Temperature Inversions.)

Controlling Spray Droplet Size

VMD – VMD is the expression of the droplet size of the spray cloud. The VMD value means that 50% of the droplets are larger than the expressed value and 50% of the droplets are smaller than the expressed value. Optimum PJ997 Herbicide spray clouds should be 450 microns with fewer than 10% of the droplets being 200 microns or smaller.

Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows usually produce larger droplets.

Pressure – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage.

Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low drift nozzles. Use 50 mesh filter screens or larger (metal or nylon).

Application Height – Making applications at the lowest height that is safe reduces exposure of spray droplets to evaporation and wind movement.

Wind – Drift potential is lowest between wind speeds of 5 to 16 km/h. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications shall be avoided below 5 km/h due to variable wind direction and high inversion potential.

Do not apply PJ997 Herbicide when wind speed exceeds 16 km/h. NOTE: Local terrain can influence wind patterns. Every applicator shall be familiar with local wind patterns and how they affect spray 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.

Temperature Inversions – Do not apply PJ997 Herbicide during a temperature inversion because the drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the following morning. Their presence can be indicated by ground fog. However, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas – Apply PJ997 Herbicide only when direction of air flow is away from nearby sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species and non-target crops).

SECTION 9.2: SPRAY BUFFER ZONE FOR GROUND APPLICATION

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

A spray buffer zone is NOT required for:

- uses with hand-held application equipment permitted on this label,
- low-clearance hooded or shielded sprayers that prevent spray contact with crop, fruit or foliage,
- soil drench or soil incorporation.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands).

| Method of application | Spray Buffer Zones (metres) Required for the Protection of: |
|-----------------------|---|
| | Terrestrial habitat |
| Field sprayer | 5 |

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

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

SECTION 9.3: CROP ROTATION RESTRICTIONS

Following an application of PJ997 Herbicide, a treated field may be rotated at any time to the following crop groups: legume vegetables (succulent or dried), fruiting vegetables (transplanted only), cucurbit vegetables (transplanted only), cereal grains and oilseeds. All other crops may be planted after 12 months.

SECTION 10: MIXING AND LOADING INSTRUCTIONS

It is important that spray equipment is clean and free of existing pesticide deposits before using this product. Follow the spray tank clean-out procedures specified on the label of the product previously applied before adding PJ997 Herbicide to the spray tank.

For best results, fill the spray tank with one half the volume of clean water needed for the area to be treated. Make sure the agitation system is operating while adding products. Slowly add the required amount of PJ997 Herbicide to the spray tank. Carefully rinse the container, adding the rinsings to the spray tank. Complete filling the spray tank to the desired level. Spray tank agitation should be sufficient to ensure uniform spray mixture during application and must continue until the spray tank has been emptied.

TANK MIXTURES:

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

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact FMC of Canada Limited at 1-833-362-7722 for information before applying any tank mix that is not specifically recommended on this label.

Tank Mixtures: Fill spray tank one-half to two-thirds full of water. With agitator operating add the recommended amount of ingredients using the following order:

- **Wettable powders and dispersible granules**
- **Agitate tank mix thoroughly**
- **Micro-encapsulated suspensions**
- **Liquid flowables and suspensions**
- **Emulsifiable concentrate formulations**
 - Fill spray tank nearly full of water
- **Glyphosate formulations**
- **Surfactants**
 - Complete filling the spray tank to the desired level

If sprayer has been stored or idle, purge the spray boom and nozzles with clean water before charging sprayer with products to be applied.

Avoid the overnight storage of PJ997 Herbicide spray mixtures.

Premixing PJ997 Herbicide spray solutions in nurse tanks is not recommended. Maintain continuous and adequate spray solution agitation until all the spray solution has been used.

Do not use with tank additives that alter the pH of the spray solution.

SECTION 11: SPRAYER CLEANUP

Many herbicide products are very active at low rates, especially to sensitive crops. Residues left in mixing equipment, spray tanks, hoses, spray booms and nozzles can cause crop effects if such equipment is not properly cleaned between uses.

As soon as possible after spraying PJ997 Herbicide and before using the sprayer equipment for any other applications, the sprayer equipment must be thoroughly cleaned using the following procedure. In addition, users must take appropriate steps to ensure proper equipment clean-out for any other products mixed with PJ997 Herbicide, as directed on the companion product labels. Maximum cleaning can be achieved by cleaning the spray system immediately following use.

1. Drain sprayer tank, hoses, spray boom and spray nozzles. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then, thoroughly flush sprayer hoses, spray boom and spray nozzles with a clean water rinse.
2. Next, prepare a sprayer cleaning solution by adding 3 litres of ammonia (containing at least 3% active) per 100 litres of clean water. Prepare sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush the tank, hoses, spray boom and spray nozzles.
3. If possible, leave the ammonia solution or fresh water left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage to dissolve and dilute any remaining traces of herbicide.
4. Before using the sprayer, completely drain the sprayer system. Rinse the tank with clean water and flush through the hoses, spray boom, and spray nozzles with clean water.
5. Remove and clean spray tips and all filters and screens separately in an ammonia solution prepared as in Step 2, above. Replace these parts right after cleaning and rinsing.
6. Properly dispose of all cleaning solution and rinsate in accordance with established regulations and guidelines. Do not apply sprayer cleaning solutions or rinsate to sensitive crops.

Do not store the sprayer overnight or for any extended period of time with PJ997 Herbicide spray solution remaining in the tank, spray lines, spray boom plumbing, spray nozzles or strainers.

Small quantities of PJ997 Herbicide remaining in improperly cleaned mixing, loading and/or spray equipment may be released during subsequent applications, potentially causing crop effects.

SECTION 12: RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, PJ997 Herbicide is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to PJ997 Herbicide and other Group 14 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 PJ997 Herbicide or other Group 14 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 FMC representatives at <https://ag.fmc.com/ca/en>.

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