

(Container)



Starane™ Dry Herbicide

GROUP	4	HERBICIDE
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Starane Dry Herbicide is a selective herbicide for postemergent control of annual broadleaved weeds including cleavers and certain ALS-resistant broadleaved weeds such as kochia in spring wheat, durum wheat, winter wheat, spring barley, oats, rangeland, permanent pasture, rights-of-way, industrial and other non-crop areas of Canada. Starane Dry Herbicide will also suppress hemp-nettle, stork's-bill and wild buckwheat.

AGRICULTURAL

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

ACTIVE INGREDIENT: fluroxypyr, (present as 1-methylheptyl ester) 35%
contains 1,2-benzisothiazolin-3-one at 0.002 % as a preservative

Wettable granule

REGISTRATION NO. 32565 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 1 kg - bulk

Corteva Agriscience Canada Company

Suite 240, 115 Quarry Park Rd. SE

Calgary, AB

T2C 5G9

1-800-667-3852

™ Trademark of Corteva Agriscience and its affiliated companies.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

Causes eye irritation. DO NOT get in eyes.

For agricultural/crop scenarios: DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12-hours. **For non-crop areas:** DO NOT enter or allow worker entry into treated areas until sprays have dried.

Do not use in residential areas. Residential areas are defined as any use site where bystanders including children could be exposed during or after application. This includes homes, schools, parks, playgrounds, playing fields, public buildings, or any other area where the general public including children could be exposed.

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

PROTECTIVE CLOTHING AND EQUIPMENT

Wear a hat, coveralls over a long-sleeved shirt and long pants, socks, rubber boots or work boots and chemical-resistant gloves during spraying or application. In addition, wear goggles or face shield during mixing, loading, repair and clean-up or when handling the concentrate. Applicators using a closed cab are not required to wear chemical-resistant gloves.

OPERATOR USE PRECAUTIONS

Wear freshly laundered clothing and clean protective equipment daily. At completion of spraying or end of the day take a shower immediately. Wash thoroughly with soap and water before eating, drinking, smoking or using the toilet. Remove contaminated clothing at the end of the work session and store and wash separately from household laundry using detergents and hot water before reuse. If herbicide penetrates clothing, remove immediately; then wash thoroughly and put on clean clothing. Throw away clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Avoid contact with eyes, skin and clothing. Avoid breathing spray mist.

PHYSICAL OR CHEMICAL HAZARDS

COMBUSTIBLE. Do not use or store near heat or open flame.

FIRST AID

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

If swallowed: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

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

TOXICOLOGICAL INFORMATION

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

AGRICULTURAL CHEMICAL

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

ENVIRONMENTAL PRECAUTIONS

TOXIC to non-target terrestrial plants and aquatic organisms. Observe 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 strip between the treated area and the edge of the water body.

This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms.

STORAGE

Store in original containers in a secure, dry heated storage. Do not allow contamination of seeds, plants, fertilizers or other pesticides. To prevent contamination, store this product away from food or feed. If containers are damaged or spill occurs, use the product immediately or contain the spill with absorbent materials and dispose of waste.

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.

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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 regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

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

(Booklet)



Starane™ Dry Herbicide

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Starane Dry Herbicide is a selective herbicide for postemergent control of annual broadleaved weeds including cleavers and certain ALS-resistant broadleaved weeds such as kochia in spring wheat, durum wheat, winter wheat, spring barley, oats, rangeland, permanent pasture, rights-of-way, industrial and other non-crop areas of Canada. Starane Dry Herbicide will also suppress hemp-nettle, stork's-bill and wild buckwheat.

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OPERATOR USE PRECAUTIONS

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AGRICULTURAL CHEMICAL

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ENVIRONMENTAL PRECAUTIONS

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Avoid application when heavy rain is forecast.

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STORAGE

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

GENERAL INFORMATION

Starane Dry Herbicide is a selective postemergent herbicide for the control of annual broadleaved weeds in spring wheat, durum wheat, winter wheat, spring barley and oats, not underseeded with legumes. Starane Dry Herbicide offers a novel mode of action for controlling hard-to-kill annual broadleaved weeds such as kochia (including ALS resistant biotypes) and cleavers. Starane Dry Herbicide will also provide suppression of hempnettle, wild buckwheat and stork's-bill. A NON-IONIC SURFACTANT IS REQUIRED WITH STARANE DRY HERBICIDE USED ALONE AND WITH CERTAIN TANK MIXES AS PRESCRIBED.

MODE OF ACTION

Starane Dry Herbicide is a systemic auxin-type herbicide and moves within the plant for control of exposed and underground plant tissues. The product controls weeds by disrupting normal plant growth patterns. Symptoms of weeds include epinasty (twisting of the stems) and swollen nodes.

GENERAL USE PRECAUTIONS

Sensitive Plants

Do not apply Starane Dry Herbicide directly to, or otherwise permit it to come in direct contact with susceptible crops or desirable plants including alfalfa, edible beans, canola, flowers and ornamentals, lentils, lettuce, peas, potatoes, radishes, soybeans, sugar beets, sunflowers, tomatoes or tobacco.

Non-Target Sites

Do not apply where proximity of susceptible crops or other desirable plants is likely to result in exposure to spray or spray drift. See ENVIRONMENTAL PRECAUTIONS section of the label.

Crop Rotation

Fields previously treated with Starane Dry Herbicide can be seeded the following year to alfalfa, barley, canola, corn, dry beans, flax, forage grasses, lentils, mustard, oats, peas, potatoes, rye, soybeans, sugar beets, sunflowers or wheat or fields can be summerfallowed.

Tank Mixtures

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact Corteva Agriscience Canada Company at 1-800-667-3852 or www.corteva.ca for information before mixing any pesticide or fertilizer that is not specifically recommended on this label.

Spray Equipment Precaution

Do not apply through any type of irrigation system.

To Reduce Spray Drift

- Use nozzles delivering higher volumes and coarser droplets.
- Use low pressures (200 to 275 kPa).
- Spray when the wind velocity is 15 km/hr or less.
- Spot treatments should only be applied with a calibrated boom to prevent over-application.

Sprayer clean-out

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

1. Immediately after spraying, completely drain the sprayer tank. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
2. First rinse:
 - Spray the inside of tank with clean water and fill the sprayer with at least one tenth of the spray tank volume.
 - Agitate and circulate for 15 minutes, and flush through booms and hoses.
 - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
 - Drain tank completely.
3. Second rinse:
 - Fill the tank with clean water.
 - Add All Clear Spray Tank Decontaminator as per manufacturer's recommendations while filling the tank with clean water.

- Agitate and then flush the boom and hoses with the cleaning solution. Top up with water making sure the tank is completely full. Allow to stand for 15 minutes with agitation. Flush the solution out of the spray tank through the spray booms. Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
 - If possible, let the solution stand in the sprayer tank and booms for an extended period of time, overnight if possible.
 - After flushing the boom and hoses, drain tank completely.
 - Remove nozzles and screens and clean separately with a cleaning agent or an ammonia solution (100 mL in 10 L water).
4. Third rinse:
- Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume.
 - Remove end caps or open ball valves on the ends of each boom section, and flush solution through the boom ends to ensure there is no spray solution trapped between the boom end and the nozzles.
 - Drain tank completely.

DIRECTIONS FOR USE

READ THE ENTIRE LABEL BEFORE USE. FAILURE TO FOLLOW LABEL INSTRUCTIONS MAY RESULT IN ERRATIC WEED CONTROL OR CROP DAMAGE. DO NOT APPLY TO CROPS UNDERSEEDED WITH LEGUMES.

As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests. **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Field sprayer application

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

Aerial application

DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply when wind speed is greater than 16 km/h at flying height at the site of application. DO NOT apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) medium or course classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length MUST NOT exceed 65% of the wing or rotorspan.

Crops Registered

spring wheat
durum wheat
winter wheat
spring barley
oats

STARANE DRY HERBICIDE ALONE

Apply Starane Dry Herbicide with ground or aerial application equipment (see Application directions section) for postemergent control of cleavers and kochia, including ALS resistant kochia and other broadleaved weeds infesting spring wheat, durum wheat, winter wheat, spring barley and oats. See following table for weeds controlled/suppressed and applications rates. A NON-IONIC ADJUVANT SUCH AS AGRAL 90 OR ACTIVATOR PLUS IS REQUIRED AT A RATE OF 2 L/1000L OF SPRAY MIXTURE (0.2%V/V).

Weeds Controlled or Suppressed By Starane Dry Herbicide Alone

Weeds Controlled	Starane Dry Herbicide Rate (kg/ha)
chickweed* (up to 8 cm)	0.4
cleavers (1-6 whorls)	0.2
cleavers (1-8 whorls)	0.3
kochia* (2-8 leaf)	0.3
round-leaved mallow (1-6 leaf)	0.4
volunteer flax (1-12 cm)	0.3

Weeds Suppressed	Starane Dry Herbicide Rate (kg/ha)
hempsnettle (2-6 leaf)	0.4
stork's-bill (1-8 leaf)	0.3
wild buckwheat (1-8 leaf)	0.2

*Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

NOTE: Starane Dry Herbicide activity is influenced by weather conditions. Optimum activity requires active crop and weed growth. The temperature range for optimum activity is 12°C to 24°C. Reduced activity will occur when temperatures are below 8°C or above 27°C. Frost before application (3 days) or shortly after (3 days) may reduce weed control and crop tolerance. Weed control may be reduced during stress conditions, e.g. drought, heat or cold stress, or if weeds have initiated flowering, or if heavy infestations exist.

Application Timing

Apply to actively growing spring wheat, durum wheat, spring barley and oats from the 2-leaf crop growth stage up to and including initiation of stem elongation. Apply to winter wheat in the spring from the 3 tiller stage to just before the flag leaf stage. Apply when weeds are actively growing. Best results are obtained from applications made to seedling weeds. Only weeds emerged at the time of treatment will be controlled. Extreme growing conditions such as drought or near freezing temperature prior to, at and following time of application may reduce weed control and increase the risk of crop injury at all stages of growth. Foliage that is wet at the time of application may decrease control. Starane Dry Herbicide applications are rainfast within 1 hour after application. Under conditions of low crop and high weed density, control may be reduced.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide and continue agitation.
3. When Starane Dry Herbicide is completely dispersed add 0.2% v/v of a non-ionic adjuvant such as Agral 90 or Activator Plus, and then continue to fill tank to desired level with water.

Preharvest/Grazing Intervals (Starane Dry Herbicide applied alone)

- Livestock may be grazed on treated crops 3 days following application.
- Do not harvest the treated crop within 60 days after application.

APPLICATION DIRECTIONS (GROUND AND AERIAL APPLICATIONS)

(1) Ground Application

Using ground equipment, apply Starane Dry Herbicide alone or with tank mix partners as a broadcast treatment. Apply Starane Dry Herbicide alone at the recommended rates in a spray volume of 50-100 L water/ha. When tank mixing refer to the label of the tank mix partner label for additional instructions, water volumes, precautions and weeds controlled.

(2) Aerial Application

DO NOT use human flaggers.

Use Starane Dry Herbicide alone or tank mixed with a product registered for aerial application as a broadcast treatment. Apply the recommended rates of Starane Dry Herbicide and tank mix partner as indicated elsewhere on this label. Apply in a spray volume of 30-50 L water/ha. Refer to the tank mix partner label for additional instructions, precautions and weeds controlled.

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate swath marking devices.

Use Precautions

Apply only when meteorological conditions at the treatment site allow for complete and even coverage. Apply only under conditions of good practice specific to aerial application as outlined in the National Aerial Pesticide Application Manual, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

Operator Precautions

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

Product Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-667-3852 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

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

The following drift management requirement must be followed to avoid off-target drift movement from aerial applications: Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

TANK-MIX COMBINATIONS - STARANE DRY HERBICIDE + LIQUID ACHIEVE SC HERBICIDE (Do not apply to oats)

For control of wild oats and green foxtail in spring wheat, winter wheat and spring barley apply 0.5 L/ha of Liquid Achieve SC with Starane Dry Herbicide. Refer to the above table for rates and broadleaved weeds controlled or suppressed with Starane Dry Herbicide. Read both product labels thoroughly for more information on precautions and additional directions for use. To control additional broadleaved weeds tank mix with either 2,4-D ester or MCPA ester up to a maximum of 560 g ae/ha. (equivalent to 1.0 L/ha of 2,4-D LV600 Herbicide (0.85 L/ha 2,4-D Ester 700 Herbicide) or 1.12 L/ha of MCPA LV500 Herbicide) (0.93 L/ha MCPA Ester 600 Herbicide) or 1.5 to 2.0 L/ha Curtail M Herbicide. Refer to the 2,4-D ester or MCPA ester tank mix partner label for rates less than 560 g ae/ha and weeds controlled.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. **Agitation must be continued throughout the entire mixing and spraying procedure.**
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add Liquid Achieve
4. If 2,4-D ester, MCPA ester or Curtail M are also being added, add these next.
5. Lastly, add only the adjuvant and rates of adjuvant recommended on the Liquid Achieve label and then continue to fill tank to desired level.

TANK-MIX COMBINATIONS - STARANE DRY HERBICIDE + CURTAIL™ M HERBICIDE

Starane Dry Herbicide mixed with Curtail M Herbicide will control a wide spectrum of broadleaf weeds. Refer to Curtail M Herbicide label for additional precautions and directions for use, particularly crop rotation restrictions.

Timing of Application

Apply postemergence when weeds are in the seedling stage (2-4 leaf) and when spring wheat, durum wheat, spring barley and oats are in the 3-leaf to just before the flag leaf emergence stage. Apply to winter wheat in the spring from the 3 tiller stage to just before the flag leaf stage. Do not apply later than the flag-leaf stage.

Low Rate: To control or suppress the following weeds apply a uniform spray containing Starane Dry Herbicide at 0.3 kg/ha tank mixed with Curtail M Herbicide at 1.5 L/ha.

Weeds Controlled

Canada thistle (low infestations)	mustard, wild
cleavers (1-8 whorls)	shepherd's-purse
flax, volunteer (1-12 cm)	stinkweed
flixweed (spring seedling 2-4 leaf)	sunflower, volunteer
kochia♦♦♦	wild buckwheat (1-8 leaf)
lamb's-quarters	

Weeds Suppressed

stork's-bill (1-8 leaf)

High Rate: To control or suppress the following weeds apply a uniform spray containing Starane Dry Herbicide at 0.4 kg/ha tank mixed with Curtail M Herbicide at 2.0 L/ha.

Weeds Controlled

Canada thistle♦	lamb's-quarters	sow-thistle (annual)
canola (volunteer)	redroot pigweed	sow-thistle (perennial) ♦
cleavers (1-8 whorls)	round-leaved mallow (1-6	stinkweed
common chickweed♦	leaf)	stork's-bill (1-8 leaf)
common groundsel	Russian pigweed	sunflower (volunteer)
dandelion♦♦	scentless chamomile	tartary buckwheat
flixweed♦♦	shepherd's-purse	volunteer flax (1-12 cm)
hemp-nettle (2-6 leaf stage)	smartweed	wild buckwheat (1-8 leaf)
kochia♦♦♦		wild mustard

♦ Season long control, with some regrowth in the fall (top growth control).

♦♦ Spring rosettes only.

♦♦♦ Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

The active ingredients in this tank mixture will only control chickweed that is emerged at time of application. Chickweed plants which emerge after application will not be controlled. To improve the reduction in chickweed population at the end of season, delay the timing of application as late as possible to when the majority of chickweed plants have emerged. The reduction in chickweed population will also be improved in crops which are more competitive and which allow limited light penetration.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add Curtail M.
4. Lastly, add 0.2% v/v of a non-ionic adjuvant such as Agral 90 or Activator Plus, and then continue to fill tank to desired level with water.

Pre-Harvest/Grazing Intervals (Starane Dry Herbicide + Curtail M Herbicide)

- Do not cut or graze treated fields within 7 days after application.
- Do not harvest the treated mature crop within 60 days after application.

When tank mixing with Curtail M Herbicide, wear goggles or face shield, coveralls and chemically resistant gloves, apron and boots when mixing, loading and during clean-up and repair.

Curtail M Herbicide contains an ingredient that is rapidly absorbed through the skin and respiratory tract.

TANK MIXES WITH STARANE DRY HERBICIDE + CURTAIL M HERBICIDE FOR ANNUAL GRASS CONTROL (Do not apply to oats)

Tank mixtures of Starane Dry Herbicide + Curtail M Herbicide with other herbicides will provide control of additional weeds. See following table for tank mixes with Starane Dry Herbicide + Curtail M Herbicide. Follow all precautions, minimal interval to harvest and directions for use on the Starane Dry Herbicide and tank-mix partner labels.

Tank-Mix Combinations with Starane Dry Herbicide at 0.3 kg/ha + Curtail M Herbicide at 1.5 L/ha or Starane Dry Herbicide at 0.4 kg/ha + Curtail M Herbicide at 2.0 L/ha

Herbicide Tank-Mix Partner	Crops Registered	Rate of Tank-Mix Partner	Adjuvant Rate	Additional Weeds
Liquid Achieve SC	spring wheat, durum wheat, winter wheat, spring barley	0.5 L/ha	Turbocharge D or Turbocharge 0.5 L/100 L of spray volume (0.5% v/v)	green foxtail wild oats
Horizon Herbicide Tank-Mix	spring wheat, durum wheat	0.23 L/ha	Score 0.8 L/ha (0.8% v/v)	green foxtail wild oats
Assert 300 SC	spring wheat, durum wheat, spring barley	1.3 L/ha 1.6 L/ha	Refer to Assert 300 SC label	wild oats (1-3 leaf) wild oats (4 leaf)
Puma 120 Super	spring wheat, durum wheat, spring barley	385 mL/ha 770 mL/ha	None required	green foxtail only green foxtail, wild oats & barnyard grass
Everest 70 WDG or Everest Solupak 70 DF	spring wheat, durum wheat	43 g/ha	Refer to Everest label	green foxtail wild oats

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add Curtail M.
4. Next, add the desired tank mix partner from the above table.
5. Lastly, add only the adjuvant and rates of adjuvant recommended on the tank mix partner label.

TANK-MIX COMBINATION - STARANE DRY HERBICIDE + 2,4-D ESTER HERBICIDE (Do not apply to oats)

For control of a wide spectrum of broadleaved weeds (see following table) apply Starane Dry Herbicide tank mixed with 2,4-D ester herbicide. Apply postemergence when weeds are in the seedling stage (2-4 leaf) and when spring wheat, durum wheat, winter wheat and spring barley are in the 4-leaf to flag-leaf stage. Apply to winter wheat in the spring from the 3 tiller stage to just before the flag leaf stage. Application before the 4-leaf stage of wheat and barley may cause severe twisting of leaves and stem, and head deformities which may reduce yield up to 10%. Do not apply later than the flag-leaf stage.

Rates of Applications

I. Low Rate: To control the following weeds apply a uniform spray containing 0.2 kg/ha Starane Dry Herbicide and 420 g a.e./ha 2,4-D ester herbicide (equivalent to 0.64 L/ha of 2,4-D Ester LV700 Herbicide).

Weeds Controlled

bluebur	hoary cress*	stinkweed
burdock	kochia***	sunflower (annual)
canola (volunteer)	lamb's-quarters	vetch
cleavers (1-6 whorls)	mustards (except green, dog & tansy)	wild radish
clovers (sweet)	plantain	wild mustard
cocklebur	prickly lettuce	wild buckwheat (1-6 leaf)
flixweed	ragweed	
field horsetail*	shepherd's-purse	
goat's-beard		

II. High Rate: To control the above weeds plus the additional weeds listed below, apply a uniform spray containing 0.3 kg/ha of Starane Dry Herbicide and 560 g a.e./ha of 2,4-D ester herbicide (equivalent to 0.85 L/ha of 2,4-D Ester LV700 Herbicide).

Additional Weeds Controlled:

blue lettuce*	hairy galinsoga	Russian thistle
cleavers (1-8 whorls)	hedge bindweed	smartweed
dandelion**	lady's-thumb	stork's-bill (1-8 leaf)
docks	leafy spurge*	tansy mustard
dog mustard	oak-leaved goosefoot	tartary buckwheat
field bindweed*	redroot pigweed	volunteer flax (1-12 cm)
field peppergrass	round-leaved mallow (1-6 Leaf)	wild buckwheat (1-8 leaf)
gumweed		

Weeds Suppressed:

common chickweed*** (up to 8 cm)	hemp-nettle (2-6 leaf stage)	sow-thistle (perennial) *
Canada thistle*	sow-thistle (annual)	

* Top growth control only

** Spring rosettes

*** Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme

NOTE: The activity of Starane Dry Herbicide combined with 2,4-D ester herbicide is influenced by weather conditions. Optimum activity requires active crop and weed growth. The temperature range for optimum activity is 12°C to 24°C. Reduced activity will occur when temperatures are below 8°C or above 27°C. Frost before application (3 days) or shortly after (3 days) may reduce weed control and crop tolerance. Weed control may be reduced during stress conditions, e.g. drought, heat or cold stress, or if weeds have initiated flowering, or if heavy infestations exist.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add 2,4-D Ester.
4. Lastly, add a non-ionic adjuvant such as Agral 90 or Activator Plus at 0.2% v/v.

Pre-Harvest/Grazing Intervals (Starane Dry Herbicide + 2,4-D ester herbicide)

- Do not permit lactating dairy animals to graze fields within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.
- Do not harvest the treated mature crop within 60 days after application.

TANK-MIX COMBINATIONS - STARANE DRY HERBICIDE + 2,4-D ESTER HERBICIDE + OTHER HERBICIDES (Do not apply to oats)

Tank mixtures of Starane Dry Herbicide + 2,4-D ester herbicide with other herbicides will provide control of additional weeds. For products which may be tank mixed with Starane Dry Herbicide + 2,4-D ester herbicide and the additional weeds controlled see following table. Follow all precautions, minimal interval to harvest and directions for use on the Starane Dry Herbicide and tank-mix partner labels.

Tank-Mix Combinations with Starane Dry Herbicide (0.3 kg/ha) + 2,4-D ester herbicide (560 g a.e./ha) or Starane Dry Herbicide (0.2 kg/ha) + 2,4-D ester herbicide (420 g a.e./ha)

Herbicide Tank-Mix Partner	Crops Registered	Rate of Tank-Mix Partner	Adjuvant Rate	Additional Weeds
Liquid Achieve SC ♦♦♦	spring wheat, durum wheat, winter wheat, spring barley	0.5 L/ha	Turbocharge D or Turbocharge 0.5 L/100 L of spray volume (0.5% v/v)	green foxtail, wild oats
Horizon Herbicide Tank-mix	spring wheat, durum wheat	0.23 L/ha	Score: 0.8 L/ha (0.8% v/v)	wild oats** (1-6 leaf main stem)
		0.29 L/ha	Score: 1.0 L/ha (1.0% v/v)	green foxtail (1-5 leaf main stem) & wild oats**
Assert 300 SC	spring wheat, durum wheat, spring barley	1.3 L/ha	Refer to Assert 300 SC label	wild oats (1-3 leaf stage)
		1.6 L/ha		wild oats (4 leaf stage)
Puma 120 Super	spring wheat, durum wheat	385 mL/ha	None required	green foxtail only
		770 mL/ha		green foxtail, plus wild oats & barnyard grass
Simplicity™♦♦♦	spring wheat, durum wheat, winter wheat	0.5 L/ha	None required	barnyard grass (1-5 leaf), common chickweed (up to 10 cm), hemp nettle (1-8 leaf), Japanese brome (1-6 leaf), wild oats (up to 4 leaf, 2 tiller), wild buckwheat (1-4 leaf)
Everest 70 WDG or Everest Solupak 70 DF	spring wheat, durum wheat	43 g/ha	Refer to Everest label	green foxtail wild oats

*This tank-mix may cause temporary crop injury. However, yield will not normally be affected. This tank-mix may reduce control of wild oats compared to Liquid Achieve SC alone.

♦♦Wild oat control may be reduced when tank mixed with Starane Dry Herbicide+2,4-D ester herbicide

♦♦♦Tank mixing with Simplicity only applies to the low rate of Starane Dry Herbicide + 2,4-D ester

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add 2,4-D Ester.
4. Next, add the desired tank mix partner from the above table.
5. Lastly, add only the adjuvant and rates of adjuvant recommended on the tank mix partner label.

TANK-MIX COMBINATIONS – STARANE DRY HERBICIDE + 2,4-D ESTER HERBICIDE + REFINE EXTRA 75 DF HERBICIDE OR REFINE EXTRA 75 TOSS-N-GO HERBICIDE OR REFINE SG HERBICIDE OR REFINE SG TOSS-N-GO HERBICIDE (Do not apply to oats)

Spring Wheat (excluding durum) and spring barley

For control of a wide spectrum of broadleaf weeds, including cleavers, Starane Dry Herbicide may be tank mixed with 2,4-D ester herbicide and Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide. Apply Starane Dry Herbicide at 0.15 kg/ha tank mixed with Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide at 20 g/ha, or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide at 30 g/ha, 2,4-D ester herbicide at 280 g a.e./ha (equal to 0.5 L/ha of 2,4-D Ester LV 600 or 0.42 L/ha of 2,4-D Ester LV 700) and a non-ionic surfactant (Agral 90, Ag-Surf or Citowett Plus) at 2 L per 1000 L of spray solution. A spray volume of 100 L/ha should be utilized. Apply postemergence when weeds are in the seedling up to 4-leaf/whorls stage, and when spring wheat (excluding durum) and spring barley are in the 4-leaf to flag-leaf stage. **Do not apply to crops underseeded to legumes.**

Weeds Controlled or Suppressed

Weeds Controlled:

annual smartweed (green smartweed, lady's thumb)	groundsel (common)	shepherd's purse
ball mustard	hemp-nettle	stinkweed
chickweed (1-6 leaf) ¹	kochia ³	tartary buckwheat
cleavers ²	lamb'-quarters	volunteer rapeseed ⁴
corn spurry	narrow-leaved hawk's beard	volunteer sunflower
cow cockle	redroot pigweed	wild buckwheat ⁵
flixweed	Russian thistle	wild mustard

¹ Spray before crop canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.

² Excluding Group 2 resistant cleavers

³ Excluding Group 2 resistant kochia

⁴ The tank-mix will not control imazethapyr tolerant canola varieties (e.g. Clearfield varieties or other varieties with the Pursuit Smart trait)

⁵ Apply to actively growing wild buckwheat from the cotyledon to 3-leaf stage. Control may be reduced under environmental stress. Large plants may regrow after treatment

Weeds Suppressed:

Canada thistle ⁶	sow thistle ⁶
round leaved mallow (2-6 leaf) ⁷	stork's-bill (2-6 leaf)
scentless chamomile	toadflax (to 15 cm) ⁸

⁶ Apply when most of the thistles have emerged and are actively growing. Apply before bud stage, and before crop canopy prevents thorough coverage of thistles, when thistles are no larger than 15 cm in height for best top growth control. A single application will effectively inhibit the ability of emerged thistles to compete with the crop. Later emerging thistles will not be controlled.

⁷ Apply to actively growing round leaved mallow. Will keep mallow stunted, but may not be able to reduce overall populations.

⁸ A control program for this weed includes chemical application and frequent tillage.

Mixing Instructions

1. Fill the tank to 1/3 full of clean water.
2. With agitator running, add required amount of Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide and continue to agitate for a minimum of 5 minutes to ensure the Refine Extra 75 DF Herbicide or Refine Extra 75 Toss-N-Go Herbicide or Refine SG Herbicide or Refine SG Toss-N-Go Herbicide is completely dissolved.
3. After it is fully dissolved add the Starane Dry Herbicide with continuous agitation.
4. Add the 2,4-D ester herbicide and the rest of the water.
5. Then add adjuvant recommended on the Refine product label.

Preharvest/Grazing Intervals (Starane Dry Herbicide + Refine Extra + 2,4-D ester)

- Allow 7 days between application and grazing of lactating dairy animals.
- Do not harvest forage or cut hay within 30 days after application.
- Remove meat animals from treated fields at least 3 days prior to slaughter.
- Do not harvest the treated mature crop within 60 days after application.

TANK-MIX COMBINATION - STARANE DRY HERBICIDE + MCPA ESTER HERBICIDE

For control of a wide spectrum of broadleaved weeds (see following table) apply Starane Dry Herbicide at 0.3 kg/ha tank mixed with MCPA LV500 Herbicide at 1.12 L/ha or MCPA Ester 600 Herbicide at 0.93 L/ha. Apply postemergence when weeds are in the seedling stage (2-4 leaf) and when spring wheat, durum wheat, spring barley and oats are in the 3-leaf to flag-leaf stage. Apply to winter wheat in the spring from the 3 tiller stage to just before the flag leaf stage. Application before the 3-leaf stage of wheat and barley may cause severe twisting of leaves and stem, and head deformities which may reduce yield up to 10%. Do not apply later than the flag-leaf stage. Do not apply to cereals underseeded with a legume.

Weeds Controlled or Suppressed by Starane Dry Herbicide + MCPA ester herbicide Tank-Mix

Weeds Controlled

burdock, common	hempenettle (2-6 leaf)	ragweed, common
canola, volunteer	kochia*	shepherd's-purse
cleavers (1-8 whorls)	lamb's-quarters	stinkweed
cocklebur	mustard (except dog & green tansy)	sunflower, annual
flax, volunteer (1-12 cm)	pigweed, redroot (1-4 leaf)	vetch
flixweed	prickly lettuce	wild radish
		wild buckwheat (1-8 leaf)

Weeds Suppressed

green smartweed
stork's-bill (1-8 leaf)

*Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add MCPA Ester.
4. Lastly, add a non-ionic adjuvant such as Agral 90 or Activator Plus at 0.2% v/v.

Pre-Harvest/Grazing Intervals (Starane Dry Herbicide + MCPA ester herbicide)

- Allow 7 days between application and grazing/cutting for hay.
- Do not harvest the treated mature crop within 60 days after application.

TANK-MIX COMBINATIONS - STARANE DRY HERBICIDE + MCPA ESTER HERBICIDE + OTHER HERBICIDES (Do not apply to oats)

Tank mixtures of Starane Dry Herbicide + MCPA ester herbicide with other herbicides will provide control of additional weeds. For products which may be tank mixed with Starane Dry Herbicide + MCPA ester herbicide and the additional weeds controlled see following table. Follow all precautions, minimal interval to harvest and directions for use (including timing of application) on the Starane Dry Herbicide and tank-mix partner labels.

Tank-Mix Combinations with Starane Dry Herbicide (0.3 kg/ha) + MCPA LV500 Herbicide (1.12 L/ha) or MCPA Ester 600 Herbicide (0.93 L/ha)

Herbicide Tank-Mix Partner	Crops Registered	Rate/ha	Adjuvant Rate	Additional Weeds
Liquid Achieve SC*	spring wheat, durum wheat, winter wheat, spring barley	0.5 L/ha	Turbocharge D or Turbocharge 0.5 L/ha (0.5% v/v)	green foxtail wild oats
Horizon Herbicide Tank-mix	spring wheat, durum wheat	0.23 L	Score 0.8 L/ha (0.8% v/v)	wild oats
Assert 300 SC	spring wheat, durum wheat, spring barley	1.3 L	Refer to Assert 300 SC label	wild oats (1-3 leaf)
		1.6 L		wild oats (4 leaf)
Everest 70 WDG or Everest Solupak 70 DF	spring wheat, durum wheat	43 g/ha	Refer to Everest label	green foxtail wild oats
Puma 120 Super	spring wheat, durum wheat, spring barley	0.77 L	None required	wild oats

*MCPA ester can be tank mixed at rates up to a maximum of 560 g ae/ha with this tank-mix combination.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add MCPA ester.
4. Next, add the desired tank mix partner from the above table.
5. Lastly, add only the adjuvant and rates of adjuvant recommended on the tank mix partner label.

TANK-MIX COMBINATION - STARANE DRY HERBICIDE +SIMPLICITY™ (Do not apply to oats)

For control of a wide spectrum of broadleaf and grass weeds (see following table) in spring wheat, durum wheat and winter wheat, apply Starane Dry Herbicide tank mixed with Simplicity. Apply post-emergence when weeds are actively growing: grass weeds up to the 4 leaf, 2 tiller stage and broadleaf weeds as indicated in the following table. Best results are obtained from applications made to seedling weeds. Apply to actively growing spring or durum wheat from the 3 leaf stage to the first node stage. Apply to winter wheat in the 2-7 leaf, 4 tiller stage with a spring application. 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.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add MCPA Ester.
4. Then add other tank mix partner.
5. Lastly, add only the adjuvant and the rates of adjuvant recommended on the Simplicity label.

Preharvest/Grazing Intervals (Starane Dry Herbicide and Simplicity)

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

Rates of Application

I. Low Rate: To control or suppress the following weeds apply a uniform spray containing Starane Dry Herbicide at 0.2 kg/ha tank mixed with Simplicity at 375 mL/ha.

Weeds Controlled

cleavers (1-6 whorls)

wild oats (up to 4 leaf, 2 tiller) *

*Under low wild oat populations (<75 plants/m²)

II. High Rate: To control the above weeds plus the additional weeds listed below, apply a uniform spray containing Starane Dry Herbicide at 0.3 kg/ha with Simplicity at 500 mL/ha.

Additional Weeds Controlled

barnyard grass (1-5 leaf)

chickweed, common (up to 10 cm)

cleavers (1-8 whorls)

foxtail, yellow (1-5 leaf)

hemp nettle (1-8 leaf)

Japanese brome (1-6 leaf)

kochia* (2-8 leaf)

red root pigweed (1-8 leaf)

smartweed (lady's thumb, 1-5 leaf)

volunteer canola** (1-6 leaf)

volunteer flax (1-12 cm)

*Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

** will not control volunteer Imidazolinone-tolerant canola

Additional Weeds Suppressed

brome, downy (2-6 leaf, 2 tillers)

foxtail, green (1-5 leaf)

storks-bill (1-8 leaf)

wild buckwheat (1-4 leaf)

TANK-MIX COMBINATIONS –STARANE DRY HERBICIDE + SIMPLICITY + OTHER HERBICIDES (Do not apply to oats)

When tank mixing Starane Dry Herbicide + Simplicity at either the low or high rates, the addition of other herbicides will provide control of additional weeds. For products which may be tank mixed with Starane Dry Herbicide + Simplicity and the additional weeds controlled see following table. Follow all precautions, minimal interval to harvest and directions for use on the Starane Dry Herbicide and tank-mix partner labels.

Tank-Mix Combinations with Starane Dry Herbicide (0.2 kg/ha) + Simplicity Herbicide (375 mL/ha) or Starane Dry Herbicide (0.3 kg/ha) + Simplicity herbicide (500 mL/ha)

Herbicide Tank-Mix Partner	Crops Registered	Rate of Tank-Mix Partner	Additional Weeds Controlled
2,4-D ester*	spring wheat, durum wheat, winter wheat	Up to 420 g ae/ha	Susceptible weeds such as: mustard (except dog and green tansy), flixweed, bluebur, burdock, cocklebur, stinkweed, goatsbeard, prickly lettuce, lamb's-quarters, plantain, ragweeds, Russian thistle, shepherd's purse, annual sunflower, sweet clover, volunteer canola, wild buckwheat, wild radish *Consult 2,4-D ester labels for weed stages and rates
MCPA ester*	spring wheat, durum wheat, winter wheat	Up to 560 g ae/ha	Burdock (before the 4-leaf stage), cocklebur, flixweed, plantain, lamb's-quarters, mustards (except dog and tansy), prickly lettuce, ragweeds, Russian pigweed, shepherd's-purse, stinkweed, vetch, wild buckwheat, wild radish, wild (annual) sunflower. *Consult MCPA ester labels for weed stages and rates

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. When completely dispersed reduce agitation and add Simplicity.
4. Then add 2,4-D Ester or MCPA Ester.
5. Lastly, add only the adjuvant and rates of adjuvant recommended on the Simplicity label.

TANK-MIX COMBINATIONS –STARANE DRY HERBICIDE + PP-2525, PP-3317, PP-23235 or PP-31155

Tank mixing Starane Dry Herbicide with other herbicides will provide control or suppression of additional weeds. For the additional weeds controlled or suppressed see the following table. Follow all precautions, minimal interval to harvest and directions for use on the Starane Dry Herbicide and tank-mix partner labels. A NON-IONIC ADJUVANT SUCH AS AGRAL 90 OR ACTIVATOR PLUS IS REQUIRED AT A RATE OF 2 L/1000 L OF SPRAY MIXTURE (0.2% V/V).

Tank-Mix Combinations with Starane Dry Herbicide + PP-2525, PP-3317, PP-23235 or PP-31155

Herbicide Tank-Mix Partner	Crops Registered	Rate of Tank-Mix Partner	Additional Weeds Controlled/Suppressed
PP-2525	spring wheat, durum wheat, winter wheat, spring barley, oats	30 g/ha	Controlled: annual smartweed (green, smartweed, lady's-thumb) cow cockle, flixweed, hemp-nettle, lamb's-quarters, narrow-leaved hawk's-beard, night-flowering catchfly, redroot pigweed, Russian thistle, sow-thistle (perennial), stinkweed, volunteer rapeseed ² , wild buckwheat, wild mustard Suppressed: Canada thistle ¹

PP-3317	spring wheat, durum wheat, winter wheat, spring barley, oats	30 g/ha	Controlled: annual smartweed (green smartweed, lady's thumb), ball mustard, corn spurry, cow cockle, flixweed, groundsel (common), hemp-nettle, lamb's-quarters, narrow-leaved hawk's beard, redroot pigweed, Russian thistle, shepherd's purse, tartary buckwheat, volunteer rapeseed ² , volunteer sunflower, wild buckwheat ⁴ , wild mustard Suppressed: Canada thistle ¹ , scentless chamomile, sow-thistle (perennial), stork's-bill (2-6 leaf), toadflax ³
PP-23235	spring wheat durum wheat, spring barley	32.5 g/ha	Controlled: annual smartweed (green smartweed, lady's thumb), cow cockle, dandelion (spring or fall rosettes up to 20 cm in diameter), flixweed, hemp-nettle, lamb's-quarters, narrow-leaved hawk's-beard (up to 20 cm), night-flowering catchfly, redroot pigweed, round-leaved mallow (1-6 leaf), Russian thistle, scentless chamomile, sow-thistle (perennial), stinkweed, stork's-bill, volunteer rapeseed ² , white cockle, wild buckwheat, wild mustard Suppressed: Canada thistle ¹
PP-31155	spring wheat durum wheat, spring barley	32.5 g/ha	Controlled: annual smartweed (green smartweed, lady's thumb), ball mustard, corn spurry, cow cockle, flixweed, groundsel (common), hemp-nettle, lamb's-quarters, narrow-leaved hawk's-beard, night-flowering catchfly, redroot pigweed, Russian thistle, shepherd's purse, stinkweed, stork's-bill (2-6 leaf), tartary buckwheat, volunteer sunflower, volunteer rapeseed ² , wild buckwheat, wild mustard Suppressed: Canada thistle ¹ , dandelion (spring and fall rosettes, less than 15 cm diameter), sow-thistle (perennial) (top growth control) ¹ , scentless chamomile, toadflax ³

¹ Apply when the majority of thistles have emerged and are actively growing. For best top growth control, apply before bud stage when 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 controlled.

² Will not control imazethapyr tolerant canola varieties (e.g., Clearfield varieties or other varieties with the Pursuit Smart trait).

³ 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.

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.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. Agitation must be continued throughout the entire mixing and spraying procedure.
2. When the sprayer is three quarters full add PP-2525, PP-3317, PP-23235 or PP-31155 until completely dissolved.
3. Add Starane Dry Herbicide until completely dispersed.
4. Lastly, add only the adjuvant and rates of adjuvant recommended on the PP-2525, PP-3317, PP-23235 or PP-31155 labels.

RANGELAND, PERMANENT PASTURE, INDUSTRIAL AND OTHER NON-CROP AREAS OF CANADA

Starane Dry Herbicide Alone

Apply Starane Dry Herbicide for post emergent control of kochia, including ALS resistant biotypes in non-cropland areas including roadsides, rights of way, permanent perennial grass cover areas, and industrial vegetation management areas. See Table for weed controlled and application rates.

Kochia Control by Starane Dry Herbicide Alone

Weeds	Starane Dry Herbicide Rate (kg/ha)
Kochia* (2-8 leaf) Control	0.8
Kochia* (2-8 leaf) Suppression	0.4

*Including biotypes resistant to Group 2 herbicides that inhibit the ALS enzyme.

NOTE: Starane Dry Herbicide activity is influenced by weather conditions. Optimum activity requires active weed growth. The temperature range for optimum activity is 12°C to 24°C. Reduced activity will occur when temperatures are below 8°C or above 27°C. Frost before application (3 days) or shortly after (3 days) may reduce weed control. Weed control may be reduced during stress conditions, e.g. drought, heat or cold stress, or if weeds have initiated flowering, or if heavy infestations exist.

APPLICATION DIRECTIONS

Application Timing

Apply when weeds are actively growing. Best results are obtained from applications made to seedling weeds. Only weeds emerged at the time of treatment will be controlled. Extreme growing conditions such as drought or near freezing temperature prior to, at and following time of application may reduce weed control. Foliage that is wet at the time of application may decrease control. Starane Dry Herbicide applications are rainfast within 1 hour after application.

Individual Plant or Spot/Strip Applications

Use the following mixing chart to mix Starane Dry Herbicide with enough water to make the correct amount of spray solution. Use equipment designed for individual plant or spot/strip application, such as a backpack sprayer or hose and handgun, to spray weeds. Thoroughly and uniformly wet the foliage of all target plants but not to the point of runoff. Direct spray away from aquatic habitats and non-target terrestrial plants. DO NOT apply this product directly to fresh water habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands), estuaries or marine habitats.

Mixing Chart

Starane Dry Herbicide	Spray Solution (water and herbicide)
4.0 – 8.0 g	10 L
40 – 80 g	100 L
0.4 – 0.8 kg	1000 L

Use the higher rate in the rate range for kochia control or when growing conditions are less than favourable. The maximum annual application rate is 0.8 kg/ha.

Restrictions

- **Grazing intervals:** Livestock may be grazed on treated pasture 3 days following application.
- **Legumes:** Do not apply if the injury to legumes cannot be tolerated. Legumes may be less sensitive to herbicide injury after plant growth is mature and seed has set.
- Do not harvest grass for hay from treated areas within 7 days of application.

Tank Mix Combination – Starane Dry Herbicide + Milestone™ Herbicide

Starane Dry Herbicide can be tank mixed with Milestone Herbicide to broaden the spectrum of weeds and invasive plants controlled. Use 0.4 – 0.8 kg/ha Starane Dry Herbicide with 0.25 – 0.5 L/ha Milestone Herbicide. For mixing order see mixing instructions. When a tank mixture is used, follow all precautions, directions for use, and limitations on the tank-mix partner label.

Mixing Instructions

1. Begin to fill sprayer tank with clean water, and engage agitator. **Agitation must be continued throughout the entire mixing and spraying procedure.**
2. When the sprayer is three quarters full of water, add Starane Dry Herbicide.
3. Add Milestone next once Starane Dry Herbicide has dispersed, and prior to adding other tank mix partners.
4. Add 0.2% v/v Agral 90 or Activator Plus adjuvant or an adjuvant recommended on the tank mix partner label. Continue to fill tank to desired level with water.

BUFFER ZONES

Spot treatments using hand-held equipment DO NOT require a buffer zone

For application to rights-of-way, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies that minimize off-site drift, including meteorological conditions (for example, wind direction, low wind speed) and spray equipment (for example, coarse droplet sizes, minimizing height above canopy), should be used. However, applicators must observe the specified buffer zones for protection of sensitive aquatic habitats.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands) and sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Buffer Zone Table for Spray Droplets of ASAE MEDIUM CLASSIFICATION

Method of application	Crop	Buffer Zones (metres) Required for the Protection of:					
		Freshwater Habitat of Depths:		Estuarine/marine Habitat of Depths:		Terrestrial habitat	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m		
Field sprayer	Spring wheat, durum wheat, winter wheat, spring barley, oats	1	0	1	1	3	
	Rangeland, permanent pasture, industrial areas, other non-crop areas	1	1	1	1	5*	
Aerial	Spring wheat, durum wheat, winter wheat, spring barley and oats	Fixed Wing	5	0	1	1	95
	Rotary Wing		3	0	1	1	80

Buffer Zone Table for Spray Droplets of ASAE COURSE CLASSIFICATION

Method of application	Crop		Buffer Zones (metres) Required for the Protection of:				Terrestrial habitat
			Freshwater Habitat of Depths:		Estuarine/marine Habitat of Depths:		
			Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Spring wheat, durum wheat, winter wheat, spring barley, oats		1	0	1	1	1
Aerial	Spring wheat, durum wheat, winter wheat, spring barley, oats	Fixed Wing	4	0	1	1	70
		Rotary Wing	1	0	1	1	55

* Buffer zones for the protection of terrestrial habitats are not required for use on rights-of-way including railroad ballast, rail and hydro rights-of-way, utility easements, roads, and training grounds and firing ranges on military bases.

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

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

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, Starane Dry Herbicide is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to Starane Dry Herbicide and other Group 4 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 Starane Dry Herbicide or other Group 4 herbicides 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.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- 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 Corteva Agriscience Canada Company at 1-800-667-3852 or at www.corteva.ca.

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.

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