

2020-1059
2020-06-12

GROUP	2	HERBICIDE
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(Container Label)

REFINE® HERBICIDE

DRY FLOWABLE

For Use On Wheat (Spring, Winter or Durum), Barley, Oats, Imazethapyr Tolerant Canola (e.g. Canola varieties with the SMART™ Trait), and CDC Triffid Flax

AGRICULTURAL

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

ACTIVE INGREDIENT: Thifensulfuron methyl 75%

REGISTRATION NO. 21059 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 160 g-16 Kg

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

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PRECAUTIONS:

- **KEEP OUT OF REACH OF CHILDREN.**
- Avoid breathing spray mist.
- Avoid contact with skin, eyes and clothing.
- Wear goggles or face shield, coveralls, socks, suitable chemical resistant gloves and footwear during mixing and loading
- Do not contaminate any body of water.
- **DO NOT APPLY BY AIR.**
- Wear long-sleeved shirt, long pants, socks, and chemical-resistant gloves and footwear during mixing, loading, application, clean-up and repair. Chemical-resistant gloves are not required while operating groundboom sprayers.

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 center 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 center or doctor for treatment advice.

IF ON SKIN OR CLOTHING

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

IF SWALLOWED:

Call a poison control center 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 center or doctor. Do not give anything by mouth to an unconscious person.

For medical emergencies call **1-800-331-3148** (24 hours).

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

TOXICOLOGICAL INFORMATION: Treat symptomatically.

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.

STORAGE AND DISPOSAL

STORAGE:

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

DISPOSAL:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.

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2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the 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.

Refine is a Registered trademarks/trademarks of FMC Corporation or an affiliate.

*All other products mentioned are registered trademarks of their respective companies.

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(Directions For Use brochure)

REFINE® HERBICIDE

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FIRST AID:

IF INHALED:

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IF IN EYES:

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For medical emergencies call **1-800-331-3148** (24 hours).

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

TOXICOLOGICAL INFORMATION: Treat symptomatically

IMPORTANT

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

Do not apply, drain or flush equipment on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots. Do not use on lawns, walks, driveways, tennis courts or similar areas. Prevent drift of spray to desirable plants. Do not contaminate any body of water, including irrigation water that may be used on other crops.

Wheat, barley or oats must not be grazed by or fed to livestock within 7 days of application. Imazethapyr tolerant canola (e.g. Canola varieties with the SMART** Trait) must not be harvested, grazed or fed to livestock within 64 days of application. CDC Triffid flax must not be harvested, grazed or fed to livestock within 82 days of application.

Carefully observe sprayer clean-up instructions, as spray tank residue may damage crops other than spring wheat, winter wheat, barley, oats, or imazamox and imazethapyr tolerant canola (e.g. canola varieties with the SMART** Trait) and CDC Triffid flax.

DO NOT APPLY BY AIR.

GENERAL INFORMATION

REFINE® HERBICIDE Dry Flowable is recommended for selective postemergence control of broadleaf weeds in wheat (spring, winter, or durum) barley, oats, imazethapyr tolerant canola (eg. canola varieties with the SMART* Trait), and CDC Triffid flax, not underseeded to legumes or grasses. REFINE® HERBICIDE Dry Flowable is in the form of a dry flowable granule to be dissolved in water and applied as a uniform broadcast spray. It is noncorrosive, nonflammable, nonvolatile, and does not freeze. must REFINE® HERBICIDE Dry Flowable be applied with a recommended surfactant early postemergence to the main flush of actively growing weeds. Warm, moist growing conditions promote active weed growth and enhance the activity of REFINE® HERBICIDE Dry Flowable by allowing maximum foliar uptake and contact activity. Weeds hardened off by environmental stress may not be adequately controlled or suppressed and regrowth may occur.

REFINE® HERBICIDE Dry Flowable may only be applied using ground equipment. For best results, ensure thorough spray coverage of target weeds. Refer to "Directions For Use" section of the label for complete use details. REFINE® HERBICIDE Dry Flowable stops growth of susceptible weeds rapidly. However, typical symptoms (discolouration) of dying weeds may not be noticeable for 1 to 3 weeks after application, depending on growing conditions and weed susceptibility. Favourable growing conditions following treatment promote the activity of REFINE® HERBICIDE Dry Flowable while cold, dry conditions delay the activity. Degree of control and duration of effect depend on weed sensitivity, weed size, crop competition, growing conditions and spray coverage.

ENVIRONMENTAL HAZARDS:

- **TOXIC** to plants. Observe buffer zones specified under DIRECTIONS FOR USE.
- To reduce runoff from treated areas into aquatic habitats, consider the characteristics and conditions of the site before treatment. Site characteristics and conditions that may lead to runoff include, but are not limited to: heavy rainfall, moderate to steep slope, bare soil, poorly draining soil (e.g. soils that are compacted or fine textured such as clay).
- Avoid application of this product 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.

DIRECTIONS FOR USE:

- DO NOT re-enter treated fields until 12 hours after application.
- Apply only when the potential for drift to areas of human habitation or areas of human activity (houses, cottages, schools and recreational areas) is minimal. Take into consideration wind speed, wind direction, temperature inversion, application equipment and sprayer settings.

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 ASAE medium classification.

Buffer zones:

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

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

Method of Application	Buffer zone (metres) required for the protection of:		
	Terrestrial habitat	Aquatic habitats of water depths:	
		<1m	>1m
Field sprayer*	15	1	0

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

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

Wheat (spring, winter, or durum), barley or oats – not underseeded to legumes or grasses. Apply 20 grams of REFINE® HERBICIDE Dry Flowable per hectare with a recommended surfactant such as AG-SURF*, AGRAL** 90, or CITOWETT** PLUS at 2 litres per 1000 litres spray solution (see "Mixing Instructions"), in the spring when the crop is in the two leaf to flag leaf (shot blade) stage of growth. Thorough coverage is important.

Weeds controlled:

Chickweed*	Stinkweed
Russian thistle	Wild Buckwheat**
Volunteer rapeseed***	Redroot pigweed
Hemp-nettle	Lamb's-quarters
Green smartweed	Wild mustard
Cow cockle	Corn spurry
Lady's-thumb	

Weeds Suppressed:

Kochia

Suppression is a visual reduction in weed competition (reduced population or vigour) as compared to an untreated area. For best results apply to emerged young actively growing weeds before the canopy closes. Weeds should be less than 10 cm tall or across. Weeds that emerge after treatment will not be controlled.

NOTE:

If rain occurs soon after application control may be reduced. Several hours of dry weather are needed to allow REFINE® HERBICIDE Dry Flowable to be absorbed by weed foliage. One 320 gram container of REFINE HERBICIDE Dry flowable treats 16 ha.

Specific Weed Recommendations:

* **Chickweed:** Apply REFINE® HERBICIDE Dry Flowable herbicide plus recommended surfactant when the chickweed is small (1 to 6 leaf) and actively growing but before crop canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.

** **Wild Buckwheat:** Apply REFINE® HERBICIDE Dry Flowable plus surfactant to actively growing wild buckwheat in the 1 - 3 leaf stage. Under dry conditions control may be reduced. Large plants may regrow after treatment.

*** **Volunteer rapeseed:** REFINE® HERBICIDE Dry Flowable will not control imazethapyr tolerant canola (eg. canola varieties with the SMART* Trait).

TANK MIXES:

REFINE® HERBICIDE Dry Flowable + MCPA
FOR USE IN WHEAT (SPRING, WINTER OR DURUM), BARLEY, OATS

REFINE® HERBICIDE Dry Flowable may be tank mixed with MCPA Amine 500 to control the above weeds plus control of ragweed and suppression of Canada thistle. Apply REFINE® HERBICIDE Dry Flowable at 20 grams per hectare plus MCPA Amine 500 at 1.0 litre per hectare (or acid equivalent to deliver 500 gram active ingredient per hectare) plus a recommended surfactant such as AG-SURF*, AGRAL* 90 or CITOWETT* PLUS at 2 litres per 1000 litres of spray volume (see "Mixing Instructions" section of the label). Follow all precautionary statements for products used.

REFINE® HERBICIDE Dry Flowable + HOE-GRASS*
FOR USE ON WHEAT (SPRING, WINTER AND DURUM) AND BARLEY (EXCEPT KLAGES AND BETZES VARIETIES IN ALBERTA).

Mix REFINE® HERBICIDE Dry Flowable at 20 grams per hectare with HOE-GRASS* 284 herbicide at 2.5 - 2.8 litres per hectare for the control of certain annual broadleaf weeds and wild oats only. Do not add a surfactant. This tank mix does not control green or yellow foxtail (wild millet, pigeon grass), Persian dandelion, barnyard grass, or volunteer corn. Consult the HOE-GRASS* 284 label for additional application instructions and use precautions. Apply to broadleaf weeds that are young and actively growing. Ensure that REFINE® HERBICIDE Dry Flowable is completely dissolved in the spray tank before adding HOE-GRASS* 284. On repeat tank loads, prepare a REFINE® HERBICIDE Dry Flowable /water slurry and add it to the required water volume in the spray tank prior to adding HOE-GRASS* 284.

REFINE® HERBICIDE Dry Flowable PLUS AVENGE* 200-C
FOR CONTROL OF BROADLEAF WEEDS AND WILD OATS IN CERTAIN VARIETIES OF WHEAT (CHECK AVENGE* LABEL FOR SPECIFIC VARIETIES) AND ALL VARIETIES OF BARLEY APPLY A TANK MIX OF REFINE® PLUS AVENGE* 200-C.

Use 3.5 - 4.25 litres per hectare of AVENGE* 200-C with 20 grams REFINE® HERBICIDE Dry Flowable per hectare. Consult the AVENGE* 200-C label for crop variety restrictions, additional application instructions, and precautions. DO NOT APPLY BY AIR. Applications of REFINE® HERBICIDE Dry Flowable made at later stages of growth of broadleaf weeds may result in reduced control of these weeds. Ensure that REFINE® HERBICIDE Dry Flowable is completely in suspension in the spray tank before adding AVENGE* 200-C. Do not add a surfactant. On repeat tank loads, prepare a REFINE®/water slurry and add it to the required water volume in the spray tank prior to adding AVENGE* 200-C.

GENERAL INFORMATION

Imazethapyr Tolerant Canola (eg. canola varieties with the SMART* Trait)
- Temporary crop yellowing may be observed shortly after application of the following treatments on Imazethapyr Tolerant Canola (eg. canola varieties with the SMART* Trait), especially when applied to the crop growing under environmentally stressful conditions (see USE PRECAUTIONS section of the label). Avoid application to Imazethapyr tolerant canola (eg. canola varieties with the SMART* Trait) fields in which germination is uneven (some plants outside the recommended leaf stage for application), as crop injury may result. DO NOT apply to non-Imazethapyr tolerant canola as severe crop injury or death of the plant may occur. CAUTION: Application of the REFINE® HERBICIDE Dry Flowable on Imazethapyr tolerant canola may result in a delay in flowering.

REFINE® HERBICIDE Dry Flowable ALONE
FOR USE ON IMAZETHAPYR TOLERANT CANOLA (E.G. CANOLA VARIETIES WITH THE SMART* Trait) AND CDC TRIFFID FLAX

For the Control of Broadleaf Weeds only, Apply:

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REFINE® HERBICIDE Dry Flowable at 20 grams per hectare plus a recommended surfactant such as AGRAL* 90, AG-SURF* and CITOWETT* PLUS at 2 litres per 1000 litres spray solution or the adjuvant SUREMIX™ at 5 litres per 1000 litres spray solution (see "Mixing Instructions" section of label). Apply REFINE® herbicide when the CDC Triffid flax is from 1 cm in crop height to the pre-bud stage. DO NOT USE ON VARIETIES OF FLAX OTHER THAN CDC TRIFFID. Apply REFINE® HERBICIDE Dry Flowable when the imazethapyr tolerant canola (e.g. canola varieties with the SMART* Trait) is in the 3 to 6 leaf stage of growth but prior to beginning of bolting. Application of REFINE® HERBICIDE Dry Flowable prior to the 3 leaf stage of Imazethapyr tolerant canola (e.g. canola varieties with the SMART* Trait) could result in crop injury.

REFINE® HERBICIDE Dry Flowable will control the following broadleaf weeds:

WEEDS CONTROLLED

Chickweed*	Stinkweed
Hemp-nettle	Lamb's-quarters
Lady's-thumb	volunteer rapeseed***
Redroot pigweed	Cow cockle
Corn spurry	Wild buckwheat**
Russian thistle	Wild mustard
Green smartweed	

WEEDS SUPPRESSED

Kochia

Suppression is a visual reduction in weed competition (reduced population or vigour) as compared to an untreated area. For best results apply to emerged young actively growing weeds before the canopy closes. Weeds should be less than 10 cm tall or across. Weeds that emerge after treatment will not be controlled.

NOTE:

If rain occurs soon after application control may be reduced. Several hours of dry weather are needed to allow REFINE® to be absorbed by weed foliage.

Specific Weed Recommendations:

* **Chickweed:** Apply REFINE® HERBICIDE Dry Flowable plus recommended surfactant when the chickweed is small (1 to 6 leaf) and actively growing but before crop canopy prevents thorough coverage of weeds. Chickweed emerging after application will not be controlled.

** **Wild Buckwheat:** Apply REFINE® HERBICIDE Dry Flowable plus surfactant to actively growing wild buckwheat in the 1 - 3 leaf stage. Under dry conditions control may be reduced. Large plants may regrow after treatment.

*****Volunteer Rapeseed:** REFINE® HERBICIDE Dry Flowable Will not control Imazamox and imazethapyr Tolerant Canola (e.g. canola varieties with the SMART* Trait).

TANK MIXTURES IN:

IMAZETHAPYR TOLERANT CANOLA (EG. CANOLA VARIETIES WITH THE SMART™ TRAIT) AND CDC TRIFFID FLAX.

FOR USE ONLY IN THE PRAIRIE PROVINCES AND THE PEACE RIVER REGION OF BRITISH COLUMBIA.

REFINE® HERBICIDE Dry Flowable + ASSURE* II

For use on Imazethapyr Tolerant Canola (e.g. canola varieties with the SMART* Trait) and CDC Triffid Flax

For the control of annual grasses as well as broadleaf weeds, apply a tank mixture of:

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REFINE® HERBICIDE Dry Flowable at 20 grams per hectare
plus
ASSURE* II at 0.38 - 0.5 litres per hectare
plus
SURE-MIX* at 0.5 % v/v or 5 litres per 1000 litres spray solution

Apply the REFINE® HERBICIDE Dry Flowable plus ASSURE* II tank mixture when the CDC Triffid flax is from 1 cm in crop height to the pre-bud stage. DO NOT USE ON VARIETIES OF FLAX OTHER THAN CDC TRIFFID. Apply REFINE® HERBICIDE Dry Flowable plus ASSURE* II tank mixture when the Imazethapyr tolerant canola (e.g. canola varieties with the SMART* Trait) is in the 3 to 6 leaf stage of growth but prior to beginning of bolting. Application of the REFINE® HERBICIDE Dry Flowable plus ASSURE* II tank mixture prior to the 3 leaf stage of Imazethapyr tolerant canola (e.g. canola varieties with the SMART* Trait) could result in crop injury.

This tankmix will control the above broadleaf weeds as well as the grass weeds listed below:

RATE	WEEDS CONTROLLED	WEED LEAF STAGE
0.38 or 0.5 L/ha	Barnyard grass	2 leaf to early tillering*
	Green foxtail	2 leaf to early tillering
	Volunteer barley	2 leaf to early tillering
	Volunteer corn	2-6 leaf
	Volunteer oats	2 leaf to early tillering**
	Volunteer wheat	2 leaf to early tillering
	Wild oats	1-5 leaf without tillers (0.38 L/ha) 2 leaf to early tillering** (0.5 L/ha)
	WEEDS SUPPRESSED	
	Quackgrass	2-6 leaf*

* Use the higher rate of ASSURE* II (0.5 L/ha) for control of barnyard grass, as well as suppression of quackgrass.

** Best results on volunteer/wild oats if application is made before tillering begins.

NOTE:

Consult the ASSURE* II label for additional instructions regarding grassy weed size and/or height at time of application as well as other use precautions, and restrictions.

REFINE® HERBICIDE Dry Flowable + LONTREL* 360 EC

For use ONLY on Imazethapyr Tolerant Canola (eg. Canola varieties with the SMART™ trait)
For control of annual broadleaf weeds plus top growth control of Canada Thistle, apply a tank mixture of the following:

REFINE® at 20 grams per hectare
plus
LONTREL* 360 EC at 0.42 per hectare
plus
Non-ionic Surfactant at 0.2% v/v
or
SURE-MIX* at 0.5% v/v or 5 litres per 1000 litres spray solution

Apply the REFINE® HERBICIDE Dry Flowable plus LONTREL* 360 tank mixture when the Imazethapyr tolerant canola (e.g. canola varieties with the SMART* Trait) is in the 3 to 6 leaf stage of growth but prior to beginning of bolting. Application of the REFINE® HERBICIDE Dry Flowable plus LONTREL* 360 tank mixture prior to the 3 leaf stage of Imazethapyr tolerant canola could result in crop injury.

Weeds Controlled or Suppressed:

This tank mix will control or suppress the broadleaf weeds above with REFINE® HERBICIDE Dry Flowable used alone, PLUS provide top growth control of Canada Thistle. Consult the LONTREL* 360 EC label for additional instructions regarding Canada Thistle size at the time of application, as well as other use precautions.

REFINE® HERBICIDE Dry Flowable + LONTREL* 360 EC + ASSURE* II

For use ONLY on Imazethapyr Tolerant Canola (e.g. canola varieties with the SMART* Trait)

For top growth control of Canada Thistle as well as control of annual grasses and broadleaf weeds, apply a tank mixture of the following:

REFINE®		at 20 grams per hectare
	plus	
LONTREL* 360 EC		at 0.42 litres per hectare
	plus	
ASSURE* II		at 0.38 or 0.5 litres per hectare
	plus	
SURE-MIX*		at 0.5% v/v or 5 litres per 1000 litres spray solution

Apply the REFINE® HERBICIDE Dry Flowable plus LONTREL* 360 plus ASSURE* II tank mixture when the Imazethapyr tolerant canola (e.g. Canola varieties with the SMART* Trait) is in the 3 to 6 leaf stage of growth but prior to beginning of bolting. Application of the REFINE® HERBICIDE Dry Flowable plus LONTREL* 360 plus ASSURE* II tank mixture prior to the 3 leaf stage of Imazethapyr tolerant canola (e.g. Canola varieties with the SMART* Trait) could result in crop injury.

Weeds Controlled or Suppressed:

This tank mix will control or suppress the annual grasses & broadleaf weeds listed above with the REFINE® + ASSURE* II tank mix, PLUS provide top growth control of Canada Thistle. Consult the ASSURE* II and LONTREL* 360 EC labels for additional instructions regarding weed size &/or height at the time of application, as well as other use precautions.

MIXING INSTRUCTIONS:

1. Select a spray volume that will ensure thorough coverage and uniform spray pattern. Use a minimum of 100 L of spray volume per hectare.
2. Fill the spray tank 1/4 to 1/3 full with fresh water.
3. Add the recommended amount of REFINE® HERBICIDE Dry Flowable to the spray tank while the agitator is running. Make sure all of the REFINE® HERBICIDE Dry Flowable is in suspension. Continuous agitation is not required to keep REFINE® HERBICIDE Dry Flowable in suspension.
4. After REFINE® HERBICIDE Dry Flowable in suspension., other tankmix components may be added while continuing to fill the tank with water. The proper sequence for tank mix components is:
 - i) dry formulations
 - ii) emulsifiable concentrates (i.e. MCPA, HOE-GRASS*, AVENGE*, LONTREL* 360 EC or ASSURE* II)
 - iii) surfactants or adjuvants (recommended surfactants are AGRAL* 90, AG-SURF*, and CITOWETT* PLUS (recommended adjuvants for use with ASSURE II®, LONTREL* 360 EC or ASSURE* II + LONTREL* 360 EC tankmixes is SURE-MIX™).

NOTE:

Refer to the appropriate tank mix section of this label for more detailed recommendations on the specific surfactant or adjuvant required. A surfactant or adjuvant recommended on this label must be added to improve wetting and contact activity. Anti-foaming agents may be required. Ensure that the herbicide is completely mixed before proceeding to the next step.

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5. For repeat loads, reduce the tank heel to 10% or less of the previous load. Fill tank with fresh water as described in step 2, and continue as directed. Emulsifiable concentrates may make dispersion of REFINE® HERBICIDE Dry Flowable more difficult. For that reason, tank heels of the previous tank mix should be kept to 10% or less of the spray tank volume.
6. Do not allow the spray mixture to remain in the tank for more than 24 hours before spraying or the effectiveness may be reduced. If the spray mixture has been allowed to stand in the tank, use vigorous agitation to thoroughly disperse before resuming spraying.
7. Use the spray preparation of REFINE® HERBICIDE Dry Flowable within 24 hours or product degradation may occur. If spray solution is left standing without agitation, thoroughly agitate and re-suspend any settled herbicide before resuming the spraying operation.

The volumetric measuring cylinder for REFINE® HERBICIDE Dry Flowable is to be used only as a guide. For precise measurement, use scales calibrated in grams.

EQUIPMENT - SPRAY VOLUMES:

Apply the spray mixture uniformly with properly calibrated ground equipment only. Ensure thorough coverage and a uniform spray pattern. Flat fan nozzles are recommended (minimum 100 litres spray volume per hectare). When using flood jet or "Raindrop" nozzles, apply 225 litres per hectare total spray volume to ensure thorough coverage. Use 50 mesh filter screens or larger (metal or nylon). Continuous agitation is required to keep REFINE® HERBICIDE Dry Flowable in suspension. Apply uniformly and avoid overlapping. Shut off spray boom while starting, turning, slowing or stopping to prevent crop injury from over application.

SPRAYER CLEANUP:

To avoid subsequent injury to crops other than wheat, barley, oats, Imazethapyr tolerant canola (e.g. canola varieties with the SMART* Trait) or CDC Triffid Flax immediately after spraying and prior to spraying other crops thoroughly remove all traces of REFINE® HERBICIDE Dry Flowable from mixing and spray equipment as follows:

1. Drain tank and flush tank, boom and hoses with clean water for a minimum of ten minutes. Visually inspect tank to assure removal of all visible residues of REFINE® HERBICIDE Dry Flowable. If necessary, repeat step 1. **DO NOT CLEAN SPRAYER NEAR WELL OR WATER SOURCE OR NEAR TO DESIRABLE VEGETATION.**
2. Fill tank with clean water while adding 1 litre household ammonia (containing a minimum 3% ammonia) per 100 litres of water. Flush solution through boom and hoses, and then add more water to completely fill tank. Allow to sit for 15 minutes with agitation. Again flush the hoses, boom and nozzles with the cleaning solution and drain tank.
3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat Step 2.
5. Thoroughly rinse the tank with clean water for a minimum of 5 minutes, flushing water through the hoses and boom.

CAUTION:

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

USE PRECAUTIONS:

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Do not apply to wheat, barley, oats, Imazethapyr tolerant canola (e.g. canola varieties with the SMART* Trait) or CDC Triffid Flax that are or have been stressed prior to application by severe weather conditions, frost, low fertility, drought, water saturated soil, disease or insect damage as crop injury may result.

Do not apply to registered crops if the above stress conditions are expected within 3 days after application as crop injury may result.

Do not apply within 15 metres of a body of water or wetland area.

Do not apply to irrigated land where tail water will be used to irrigate crop land. Do not contaminate irrigation water.

Under certain environmentally stressful conditions (such as heavy rainfall, prolonged cool or hot weather, frost conditions, wide fluctuations in day/night temperatures), temporary lightening in crop colour and occasionally a slight reduction in crop height may occur.

Do not apply to crops underseeded to legumes, or grasses as injury to forage may result.

Because crop varieties differ in their tolerance to herbicides, limit first use of REFINE® HERBICIDE Dry Flowable to a small area of each variety prior to adoption as a field practice.

Do not exceed a total of 20 g per hectare per crop year.

Do not plant any crop other than wheat or barley, or Imazethapyr tolerant canola (e.g. canola varieties with the SMART™ trait) or CDC Triffid flax for 30 days after application of REFINE® HERBICIDE Dry Flowable .

RESISTANCE MANGEMENT

For resistance management, REFINE® HERBICIDE Dry Flowable is a Group 2 herbicide. Any weed population may contain or develop plants naturally resistant to REFINE® HERBICIDE Dry Flowable and other Group 2 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- ◆ Where possible rotate the used of REFINE® HERBICIDE Dry Flowable or other Group 2 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 your local FMC representative or the FMC hotline at 1-833-362-7722 for further information.

NOTICE TO USER:

2020-1059
2020-06-12

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.

STORAGE AND DISPOSAL

STORAGE:

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

DISPOSAL:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
3. Make the empty container unsuitable for further use.
4. Dispose of the container in accordance with provincial requirements.
5. For information on the 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.

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All other products mentioned are registered trademarks of their respective companies.