



**GROUP 1 HERBICIDE**

NET CONTENTS:  
10 LITRES  
(2.2 GALLONS)

**HOE-GRASS®  
284  
EMULSIFIABLE LIQUID HERBICIDE**

**FOR SALE FOR USE IN EASTERN CANADA  
AND BRITISH COLUMBIA ONLY**

**COMMERCIAL**



**REGISTRATION NO. 18042  
PEST CONTROL PRODUCTS ACT**

**GUARANTEE: DICLOFOP-METHYL 284 GRAMS PER LITRE  
(2.84 POUNDS PER GALLON)**

Bayer CropScience Inc.  
Suite 100, 3131 114th Avenue SE  
Calgary, Alberta T2Z 3X2  
Telephone: 1-888-283-6847

**READ THE LABEL AND ATTACHED LEAFLET BEFORE USING**

**PRECAUTIONS:**

**KEEP OUT OF REACH OF CHILDREN. THIS PRODUCT IS A SENSITISER AND CAUSES EYE DAMAGE. WEAR CHEMICAL RESISTANT GLOVES AND PROTECTIVE EYE EQUIPMENT WHEN HANDLING THIS PRODUCT. AVOID CONTACT WITH EYES, SKIN, OR CLOTHING.**

**AVOID BREATHING SPRAY MIST.** Avoid spray drift onto susceptible plants and **USE ONLY FOR RECOMMENDED PURPOSES AND AT RECOMMENDED RATES. TOXIC TO FISH.** Do not contaminate water supply, ponds, lakes, streams and irrigation ditches. This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., visit CropLife Canada's web site at: [www.croplife.ca](http://www.croplife.ca).

**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. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**IN CASE OF SKIN OR CLOTHING CONTACT**, 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 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.

**IN CASE OF INHALATION**, 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.

**TOXICOLOGICAL INFORMATION:**

Medical Personnel should contact Aventis' Medical Information Services, Toll-Free: 1-800-334-7577. This product contains **PETROLEUM DISTILLATES**.

**STORAGE:**

**CANNOT** be stored below freezing. If stored for one year or longer, shake well before using. Store the tightly closed container away from seeds, feeds, fertiliser, plants and foodstuffs. Keep in original container during storage.

**RECYCLABLE CONTAINER DISPOSAL:**

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2. Make the empty, rinsed container unsuitable for further use.


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**DISPOSAL OF UNUSED, UNWANTED PRODUCT:**

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**NOTICE TO USER:**

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 and Hoegrass are trademarks of the Aventis Group.



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**DIRECTIONS FOR USE****EASTERN CANADA AND BRITISH COLUMBIA****GENERAL INFORMATION:**

HOE-GRASS herbicide is a specially formulated herbicide for the control of certain annual grasses in Alfalfa, Barley (except Klages and Betzes), Carrots, Clover (Red and

Sweet), Dry Common Beans (White and Kidney Beans only), Flax (Do not use on Low Linolenic varieties), Lima Beans, Onions (Bulb only), Peas (Field and Processing), Potatoes, Rapeseed (Canola), Snap Common Beans (Snap Beans), Soybeans, Sugarbeets, Tame Mustard, Wheat (Spring, Winter and Durum) and Fall Rye.

**HOE-GRASS HERBICIDE MUST NOT BE USED ON ANY CROP FOR WHICH IT IS NOT REGISTERED.**

**SUSCEPTIBLE WEEDS:**

Wild Oats, Barnyard Grass, Foxtails (Green and Yellow), Witchgrass, Fall Panicum, Volunteer Corn and Silky Bentgrass.

**TIME OF APPLICATION:**

Apply HOE-GRASS herbicide when the grassy weeds are in the 1 to 4 leaf stage and when Volunteer Corn is 15-25 cm (6-10 inches) in height. For best results and greater yield enhancement, apply HOE-GRASS herbicide when the majority of the grassy weeds are in the 2 to 3 leaf stage.

**WILD OATS ONLY:**

Wild oats will also be controlled in the 4-5 leaf stage. For this application use **NOT LESS THAN 2.8 LITRE/HA (1 qt/A) of HOE-GRASS HERBICIDE**. Consult the table below for the specific times and rates of application.

**NOTE:**

Application at the low rate of 2.5 L/ha (0.9 qt/A) must be made before tillering (stooling) of grassy weeds.

**METHOD OF APPLICATION:**

DO NOT APPLY BY AIR.

Prior to using HOE-GRASS herbicide complete a thorough cleaning of the spray tank, lines and filter. This can be particularly important when the previously sprayed product may cause injury to the crop you intend to spray. Spray equipment should be triple rinsed using a strong detergent solution. A scrubbing of the tank is also highly recommended.

Application should be made in 100 to 300 litres of water per hectare (10-30 gallons of water per acre) at a pressure of 275 kPa (40 psi) and at a ground speed of 6 to 8 km per hour (4-5 mph). The use of 80 degree or 110 degree flat fan nozzles is recommended for optimum spray coverage. **DO NOT USE FLOOD JET NOZZLES OR CONTROLLED DROPLET APPLICATION EQUIPMENT**. In cereal crops application of the spray at a 45 degree angle forward will also result in better coverage. Application time and rate

are shown on this label. Apply when weeds are actively growing. Do not apply if rain is expected within one hour after application.

**UNIFORM, THOROUGH COVERAGE IS IMPORTANT TO OBTAIN GOOD CONTROL.** If weed populations are extremely high, it may be difficult to achieve good coverage as spray penetration may be inhibited.

**DO NOT APPLY HOE-GRASS HERBICIDE WITHIN 60 DAYS OF HARVEST.**

<b>WEEDS CONTROLLED</b>	<b>TIME OF APPLICATION</b>	<b>RATE</b>	<b>CROP</b>
Wild Oats Barnyard Grass Green & Yellow Foxtail Witchgrass Fall Panicum	1 to 4 leaf	2.5 L/ha (0.9 qt/A)	Alfalfa, Barley (except Klages and Betzes), Clover (Red and Sweet) Flax (excluding low linolenic acid varieties), Mustard, Peas (Field and Processing), Rapeseed (Canola), Fall Rye, Wheat (Spring, Durum and Winter)
Volunteer Corn	15-25 cm (6-10 in) in height		
Wild Oats	Leaves on main stem and tillers totalling five	2.8 L/ha (1.0 qt/A)	Alfalfa, Barley (except Klages and Betzes), Clover (Red and Sweet) Flax (excluding low linolenic acid varieties), Mustard, Peas (Field and Processing), Rapeseed (Canola), Fall Rye, Wheat (Spring, Durum and Winter)

Wild Oats			Carrots, Dry Common
Barnyard Grass			Beans (White and
Green & Yellow			Kidney), Lima Beans,
Foxtail	1 - 4 leaf	3.5 L/ha	Snap Common Beans,
Witchgrass		(1.25 qt/ A)	Onions (Bulb only),
Fall Panicum			Potatoes, Soybeans,
			Sugarbeets
Volunteer Corn	15-25 cm (6-10 in) in height		
Silky Bentgrass	1 - 4 leaf stage in the Fall of the seeding year		Fall Rye, Winter Wheat

**DO NOT APPLY HOE-GRASS HERBICIDE ON TAME OATS, CORN OR SORGHUM**

As HOE-GRASS herbicide controls only certain grassy weeds, it is important to control broadleaf weeds by using a pre-emergence herbicide such as Afolan (R), or Afesin (R) or a post-emergence herbicide such as Basagran (R) on crops where the use of these products is registered.

**TANK MIX OF HOE-GRASS HERBICIDE AND PARDNER (R)**

For broad-spectrum control of annual grassy and broadleaf weeds in Barley (except Klages and Betzes), Flax [when Flax is 5-10 cm or 2-4 inches in height (Do not use in Low Linolenic Acid varieties)], Spring, Durum and Winter Wheat only, apply HOE-GRASS herbicide at 2.8 litres per hectare (1.0 qt/A) plus Pardner. Apply in a minimum of 110 litres of water per hectare (10 gallons of water per acre) at a pressure of 275 kPa (40 p.s.i.) and at a speed of 6-8 km/h (4-5 mph). Consult the Pardner label for its proper rate and timing of application.

**CAUTION:**

Under some environmental conditions (for example, under hot daytime temperatures), Flax may be severely injured by Pardner. Application of the tank-mix should be avoided at these times.

**WEED STAGE:**

Spray when the grassy weeds are in the 1 to 4 leaf stage and before tillering, when Volunteer Corn is 15-25 cm (6-10 in.) in height and the broadleaf weeds are in the 1 to 4 leaf stage.



**CAUTION:**

If grassy weeds are in the correct stage for HOE-GRASS herbicide application before broadleaf weeds have emerged. **DO NOT DELAY HOE-GRASS HERBICIDE APPLICATION.**

**WEATHER CONDITIONS:**

During periods of stress [for example, very hot (28 degrees C or 82 degrees F) and/or dry conditions or low humidity] plants are not actively growing. Better control of grassy weeds will be achieved with HOE-GRASS herbicide alone than if the tank mix of HOE-GRASS herbicide /Pardner is used.

**BARLEY**

HOE-GRASS herbicide must be applied in the 1 to 4 leaf stage of the Barley and prior to tillering. Application beyond the 4 leaf stage or after tillering (stooling) will result in crop damage. Under certain environmental conditions, yellow blotches may appear on the Barley leaves. These blotches will be rapidly outgrown and will not affect maturity or yield.

**DO NOT APPLY HOE-GRASS HERBICIDE TO KLAGES OR BETZES BARLEY VARIETIES.**

**FORAGE LEGUMES**

Alfalfa, Red Clover and Sweet Clover alone or undersown to any crop for which the use of HOE-GRASS herbicide is registered (e.g. Wheat, Barley) must be treated only in the year of establishment, and must not be grazed or harvested for livestock feed in the treatment year.

**CAUTION:**

Do not tank mix HOE-GRASS herbicide with any insecticide, fungicide, fertiliser or any other chemical or additive except those listed on this label.

**CAUTION:**

HOE-GRASS herbicide must be applied before the use of any broadleaf herbicide other than those listed on this label. Mixtures with other broadleaf herbicides (2,4-D, Basagran, etc.) must not be used and will result in reduced grassy weed control. A time interval of four (4) days after application of HOE-GRASS herbicide is required before any other pesticide, fertiliser or chemical additive can be applied without a reduction in grassy weed control.

**CAUTION:**

Do not graze the treated crops or cut for hay; there are not sufficient data available to support such use.

**CAUTION:**

During periods of stress plants are not actively growing. When daytime temperatures are very hot (28 degrees C or 82 degrees F) and/or conditions are very dry and/or there is low humidity, plants are under stress. Application of HOE-GRASS herbicide during these periods may result in substantially reduced control. Under these conditions yellow blotches may appear on crop leaves. These blotches will be rapidly outgrown and will not affect maturity or yield.

**RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, HOEGRASS is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to HOEGRASS and other Group 1 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 HOEGRASS or other Group 1 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 Aventis representative, or call Aventis CropScience Canada Co. toll-free at 1-888-283-6847.

**STORAGE:**

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**RECYCLABLE CONTAINER DISPOSAL:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or

municipality for the location of the nearest collection site. Before taking the container to the collection site:

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

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

**DISPOSAL OF UNUSED, UNWANTED PRODUCT:**

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**DISPOSAL OF UNUSED SPRAY SOLUTION:**

If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, not on the crop, away from water supplies, ditches, and irrigation canals.

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**FOR MORE INFORMATION CONTACT:**

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PARDNER is a Registered Trademark of Rhone Poulenc.

BASAGRAN is a Registered Trademark of BASF AG.



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284  
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FOR EARLY POST-EMERGENCE CONTROL OF WILD OATS, GREEN AND YELLOW FOXTAIL, PERSIAN DARNEL, BARNYARD GRASS, AND VOLUNTEER CORN IN SPRING, WINTER, AND DURUM WHEATS, BARLEY, FLAX (excluding low linolenic acid varieties), RAPESEED (CANOLA), TAME MUSTARD, SUNFLOWERS, SUGARBEETS, AND OTHER SPECIAL CROPS.

**FOR SALE FOR USE IN THE PRAIRIE PROVINCES and  
PEACE RIVER REGION OF BRITISH COLUMBIA ONLY**

**COMMERCIAL**



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**STORAGE:**

Keep in original container during storage. CANNOT be stored below freezing. If stored for one year or longer, shake vigorously before using. Store the tightly closed container away from seeds, feeds, fertiliser, plants and foodstuffs. Do not use or store in or around the home.

**RECYCLABLE CONTAINER DISPOSAL:**

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**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.

**EYE CONTACT:** 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.

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Onions (Bulb only), Peas (Field and Processing), Potatoes, Rapeseed (Canola), Rye (Spring and Fall), Russian Wild Rye Grass, Sainfoin (Seed production only), Snap Common Beans, Soybeans, Sugarbeets, Sunflowers (except Corona), Tame Buckwheat, Tame Mustard, Triticale, Wheat (Spring, Durum and Winter), Wheat Grass (Crested & Intermediate).

**HOE-GRASS HERBICIDE MUST NOT BE USED ON ANY CROP FOR WHICH IT IS NOT REGISTERED.**

DO NOT APPLY HOE-GRASS HERBICIDE TO TAME OATS, SORGHUM, CORN OR CANARY SEED GRASS.

**SUSCEPTIBLE WEEDS:**

Wild Oats, Green and Yellow Foxtail (Wild Millet, Pigeon Grass), Persian Darnel, Barnyard Grass and Volunteer Corn.

**TIME AND RATE OF APPLICATION:**

Apply HOE-GRASS herbicide when the grassy weeds are in the 1 to 4 leaf stage (1 to 3 leaf stage for Persian Darnel) and when Volunteer Corn is 15-25 cm (6-10 inches) in height. For best results and greater yield enhancement, apply HOE-GRASS herbicide when the majority of the grassy weeds are in the 2 to 3 leaf stage (usually 10 to 16 days after emergence).

**WILD OATS ONLY:**

Wild oats will also be controlled in the 4 to 5 leaf stage (usually 16-20 days after emergence). For application at this time the HIGHER RATE OF HOE-GRASS MUST BE USED. Consult the table below for the specific times and rates of application.

For the control of Green and Yellow Foxtail, Barnyard Grass and Persian Darnel, application must be made before tillering (stooling). Wild Oats will be controlled provided the total number of leaves does not exceed five. Leaves on both the main stem and on the tillers must be counted. Consult the table below for the specific times and rates of application.

WEEDS CONTROLLED	TIME OF APPLICATION	RATE OF APPLICATION
Wild Oats Green and Yellow Foxtail (Wild Millet, Pigeon Grass) Barnyard Grass	1 to 4 leaf	2.5 L OF HOE-GRASS/ha (0.9 quart of HOE-GRASS/acre)
Persian Darnel	1 to 3 leaf	
Volunteer Corn	15-25 cm in height (6-10 in)	
Wild Oats only	leaves on main stem and tillers totalling five	2.8 L of HOE-GRASS/ha (1 quart of HOE-GRASS/acre)

#### **METHOD OF APPLICATION:**

**NOTE:** Prior to using HOE-GRASS herbicide complete a thorough cleaning of the spray tank, lines and filter. This can be particularly important when the previously sprayed product may cause injury to the crop you intend to spray. Spray equipment should be triple rinsed using a strong detergent solution. A scrubbing of the tank is also highly recommended. Application should be made in 110 litres of water per hectare (10 gallons of water per acre) at a pressure of 275 kPa (40 psi) and a ground speed of 6 to 8 km per hour (4-5 mph). The use of 80 degree or 110 degree stainless steel flat fan nozzles is recommended for optimum coverage. **DO NOT USE FLOOD JET NOZZLES, CONTROLLED DROPLET APPLICATION EQUIPMENT OR SPRAFOIL® EQUIPMENT.** Uniform, thorough coverage is important to achieve good control. Application of the spray at a 45 degree angle forward will also result in better coverage. Application time and rate are shown on this label. Apply when weeds are actively growing. Do not apply if rain is expected within one hour after application.

**DO NOT APPLY HOE-GRASS HERBICIDE WITHIN 60 DAYS OF HARVEST**

#### RATE OF APPLICATION:

Alfalfa, Barley (except Klages and Betzes varieties in Alberta), Bromegrass, Clover (Red, Alsike & Sweet), Creeping Red Fescue, Flax (excluding low linolenic acid varieties), Lentils, Peas (Field and Processing), Rapeseed (Canola), Rye (Spring & Fall), Russian Wild Rye Grass, Sainfoin (Seed production only), Sunflowers(except Corona), Tame Buckwheat, Tame Mustard, Triticale, Wheat (Spring, Durum and Winter), Wheat Grass (Crested & Intermediate).	2.5-2.8 L/ha (0.9-1 quart/acre)  1 jug (10 L or 2.2 gallons) treats 3.55-4.0 ha (8.75 - 10 acres)
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NOTE: The higher rate (2.8 L/ha or 1 qt/A) **must be used to control Wild Oats with leaves on the main stem and leaves on tillers totalling five.** Barnyard Grass, Green and Yellow Foxtail (Pigeon Grass, Wild Millet) in the 1-4 leaf stage, and Persian Darnel in the 1-3 leaf stage will also be controlled at this rate.

Carrots, Dry Common Beans (Black, White, Pinto only), Fababeans, Onions (Bulb only), Potatoes, Snap Common Beans, Soybeans, Sugarbeets.	3.5 L/ha (1.25 quarts/acre) 1 jug (10 L or 2.2 gallons) treats 2.85 ha (7 acres)
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#### BARLEY:

HOE-GRASS herbicide must be applied in the 1 to 4 leaf stage of the Barley and prior to tillering. Application beyond the 4 leaf stage or after tillering (stooling) will result in crop damage. Under certain environmental conditions, yellow blotches may appear on the Barley leaves. These blotches will be rapidly outgrown and will not affect maturity or yield.

DO NOT APPLY HOE-GRASS HERBICIDE TO KLAGES OR BETZES BARLEY VARIETIES IN ALBERTA.

#### FORAGE LEGUMES AND GRASSES:

ALFALFA, BROMEGRASS, CREEPING RED FESCUE, CRESTED WHEAT GRASS, INTERMEDIATE WHEAT GRASS, RED CLOVER, SWEET CLOVER, RUSSIAN WILD RYE GRASS, and seed production only for seedling ALSIKE CLOVER and seedling SAINFOIN alone, or undersown to any crop for which the use of HOE-GRASS herbicide is registered (e.g. Wheat, Barley, Rapeseed, etc.) must be treated only in the year of establishment, and must not be grazed or harvested for livestock feed in the treatment year.

## WEED LEAF STAGES

One-Leaf	Two-Leaf	Three-Leaf	Four-Leaf	Five-Leaf	More than Five Leaves
			[diagram]		
	OPTIMUM STAGE Usually 10 to 16 days after Emergence		Too late for Persian Darnel	Too Late for Other Grassy Weeds	TOO LATE

**NOTE:** Use higher rate to control Wild Oats in the five (5) leaf stage.

### CAUTION:

Do not graze the treated crops or cut for hay; there are not sufficient data available to support such use.

### CAUTION:

During periods of stress, plants are not actively growing. When daytime temperatures are very hot (28 degrees C or 82 degrees F) and/or conditions are very dry and/or there is low humidity, plants are under stress. Application of HOE-GRASS herbicide during these periods may result in substantially reduced control. Under these conditions yellow blotches may appear on crop leaves. These blotches will be rapidly outgrown and will not affect maturity or yield.

### CAUTION:

UNIFORM, THOROUGH COVERAGE IS IMPORTANT TO ACHIEVE GOOD CONTROL. If weed populations are extremely high, it may be difficult to achieve good coverage as spray penetration may be inhibited. Apply the spray at a forward angle of 45°, and ensure that weeds are young and actively growing.

### CAUTION:

Application of HOE-GRASS HERBICIDE MUST take place before tillering (stooling) of the grassy weeds except Wild Oats. Poor weed control will result if application is made past tillering. See previous section for precise guidelines.

### MIXING INSTRUCTIONS:

1. Ensure that spray tank is thoroughly clean.
2. Fill tank half full with clean water and start agitation or by-pass system.
3. Remove straining screen from filler opening of spray tank.
4. If a broadleaf herbicide is to be used, refer to the section on TANK MIX COMBINATIONS WITH HOE-GRASS. Add the broadleaf herbicide FIRST prior to adding HOE-GRASS, and agitate.

5. Add the correct amount of HOE-GRASS and continue agitation. Replace straining screen.
6. Add the remaining amount of water and continue agitation.
7. Spray out immediately. Spray mixture should not be left in tank overnight.
8. When mixing second and subsequent tankfuls, ensure that the tank is half-full of clean water prior to adding herbicide.
9. Immediately after use, thoroughly clean the sprayer by flushing with a water/detergent mixture.

## **AIRCRAFT APPLICATION**

**FOR USE ONLY ON WHEAT, BARLEY, FLAX (excluding low linolenic acid varieties), AND RAPESEED (CANOLA)**

### **Aerial Application Instructions**

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 marking devices.

### **Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *Basic Knowledge Requirements for Pesticide Education in Canada: Applicator Core* and *Aerial Module*, developed by CAPCO.

Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

## **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**

When applying HOE-GRASS herbicide by aircraft, uniform spray coverage is essential. To achieve uniform spray coverage, the use of spray nozzle tips and spraying pressures which provide a small droplet size (150-250 micron range or .006-.01 inch range) is recommended.

Apply HOE-GRASS herbicide in no less than 35 litres of water per hectare (3 Imperial gallons of water per acre) at a pressure of no less than 300 kPa (45 psi).

**DO NOT USE RAINDROP NOZZLES.**

**DO NOT** apply ANY tank mix combinations of HOE-GRASS herbicide by aircraft as crop damage and reduced grassy weed control will result.

Pesticides, fertilizer or other chemical additives must be applied at least 4 days after HOE-GRASS herbicide is applied.

**DO NOT** tank-mix HOE-GRASS herbicide with ANY herbicide, insecticide, fungicide, fertiliser or chemical additive when application is made by aircraft.

The spray tank and boom must be thoroughly flushed with clean water before and after using HOE-GRASS herbicide.

**DO NOT** spray HOE-GRASS herbicide if the wind speed is more than 13 km/h (8 mph). **DO NOT** spray HOE-GRASS herbicide if Tame Oats, Sorghum, Corn or Canary Seed Grass are present in adjacent downwind fields. Avoid spray drift onto all non-target areas.

DO NOT apply HOE-GRASS herbicide to KLAGES or BETZES Barley varieties in Alberta.

### WEED LEAF STAGES FOR TANK MIX

One-Leaf	Two-Leaf	Three-Leaf	Four-Leaf	Five-Leaf	More than Five Leaves
[diagram]					
	OPTIMUM STAGE Usually 10 to 16 days after Emergence		Too late for Persian Darnel	Wild Oats with HOE- GRASS herbicide PLUS Decis 5.0 EC insecticide only. Too late for other weeds and tank mixes.	TOO LATE

### TANK MIX COMBINATIONS WITH HOE-GRASS HERBICIDE

HOE-GRASS herbicide can be tank-mixed with a number of pesticides for broad spectrum control. However, the tank-mix treatments may result in reduced control of grassy weeds. Follow label directions carefully. Do not tank-mix under stress conditions such as prolonged periods of drought, excessively hot temperatures or low humidity.

#### HOE-GRASS HERBICIDE PLUS PARDNER ®

**Wheat (Spring and Durum), Barley (except varieties Klages and Betzes in Alberta) and Flax (excluding low linolenic acid varieties):** Mix HOE-GRASS herbicide at 2.8 litres per hectare (1 quart per acre) with Pardner for the control of grassy and broadleaf weeds. Flax must be 5-10 cm (2-4 inches) in height when applying the tank-mix. This tank mixture controls grassy weeds in the 1-4 LEAF STAGE ONLY. Application must be made prior to tillering of the grassy weeds.

Consult Pardner label for proper rate and timing of application.

#### HOE-GRASS HERBICIDE PLUS LONTREL ®

**Rapeseed (Canola):** Mix HOE-GRASS herbicide at 2.8 litres per hectare (1 quart per acre) with Lontrel for the control of grassy and certain broadleaf weeds and **Canada Thistle**. This tank mixture controls grassy weeds in the 1-4 LEAF STAGE ONLY. Application must

be made prior to tillering of the grassy weeds. USE THE LOWER RATE OF LONTREL IN THE TANK MIXTURE.

Consult the Lontrel label for proper rate and timing of application.

#### **HOE-GRASS PLUS DECIS ® 5.0 EC**

**Wheat (Spring, Winter and Durum), Barley (except varieties Klages and Betzes in Alberta), Flax (excluding low linolenic acid varieties), Rapeseed (Canola), Mustard and Potatoes:** Mix HOE-GRASS herbicide at 2.5-3.5 litres per hectare (0.9-1.25 quarts per acre) with DECIS 5.0 EC insecticide for the control of annual grassy weeds and certain insect pests. At these rates HOE-GRASS herbicide will control grassy weeds as specified elsewhere on this label. Before using this tank mix, carefully read the DECIS 5.0 EC insecticide label paying particular attention to insects controlled, rate and time of application.

#### **CAUTION:**

Carefully read and follow all precautions and limitations of the HOE-GRASS herbicide label and that of the appropriate tank mix pesticide.

#### **CAUTION:**

If grassy weeds are in the correct stage for HOE-GRASS herbicide application before broadleaf weeds have emerged or before insects are present DO NOT DELAY HOE-GRASS APPLICATION.

#### **CAUTION:**

During periods of environmental stress (for example, prolonged periods of drought, excessively hot daytime temperatures or low humidity) plants are not actively growing. Better grassy weed control will be achieved with HOE-GRASS herbicide alone than if tank-mixed.

#### **CAUTION:**

HOE-GRASS herbicide must be applied before the use of any broadleaf herbicide other than those registered on this label. Mixtures with other broadleaf herbicides (2,4-D, MCPA, Banvel ®, etc.) must not be used, as a reduction in grassy weed control will result. A time interval of four (4) days after application of HOE-GRASS herbicide is required before any other pesticide, fertiliser or chemical additives can be applied.

#### **RESISTANCE MANAGEMENT RECOMMENDATIONS:**

For resistance management, HOEGRASS is a Group 1 herbicide. Any weed population may contain or develop plants naturally resistant to HOEGRASS and other Group 1 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 HOEGRASS or other Group 1 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 Aventis representative, or call Aventis CropScience Canada Co. toll-free at 1-888-283-6847.

#### **STORAGE:**

Keep in original container during storage. CANNOT be stored below freezing. If stored for one year or longer, shake vigorously before using. Store the tightly closed container away from seeds, feeds, fertiliser, plants and foodstuffs.

#### **RECYCLABLE CONTAINER DISPOSAL:**

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

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

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

#### **DISPOSAL OF UNUSED, UNWANTED PRODUCT:**

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

**DISPOSAL OF UNUSED SPRAY SOLUTION:**


If any spray solution remains in the tank after spraying is finished, it should be sprayed on the perimeter of the area just sprayed, not on the crop, away from water supplies, ditches, and irrigation canals.

**NOTICE TO USER:**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the Pest Control Products Act to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

**FOR MORE INFORMATION CONTACT:**

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