264 - 811



08-17-2010

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

> OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Ms. Laura Phelps Bayer CropScience LP P.O. Box 12014, 2 T.W. Alexander Dr. Research Triangle Park, NC 27709

AUG 17 2010

Subject: Label Amendment – address mefenpyr-diethyl maximum seasonal use rate Product Name: Silverado Wild Oat Herbicide EPA Registration Number: 264-801 Decision Number: 434032

The label amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you make the following change to the product labeling:

- 1) Revise the section heading, "Container Disposal" with "Container Handling" in the Storage and Disposal section.
- 2) Replace "General" with "Product" in the section heading, "General Information" on page 3. The word "General" is an implied safety claim that makes all associated text unenforceable.
- 3) Remove the word "Recommendation(s)" from the section headings "Weed Control Recommendations" and "Rate Recommendation Tables for Weed Control" on page 5. In addition, replace "recommendations" with "instructions" in the last sentence of the Tank Mix section. Recommendations are not enforceable and must not be used when defining application rates.
- 4) In the 'Sensitive Areas' section on page 6, replace "should" with "must" in the first sentence.
- 5) Revise the section heading on page 8, "Precautions for Use" to "Precautions and Restrictions for Use."

One copy of the master label stamped "Accepted with Comments" is enclosed for your records. <u>Products shipped after 18 months from the date on this notice or the next printing of the label</u> <u>whichever occurs first, must bear the new revised label.</u> If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA. Your release for shipment of this product constitutes acceptance of these conditions. This label supersedes all previous accepted labels. <u>You must submit one copy of the final printed label before the product</u> is released for shipment.

Sincerely, attim

Kathryn V. Monatgue Product Manager (23) Herbicide Branch Registration Division (7505P)

# SILVERADO<sup>™</sup> Wild Oat Herbicide

A Herbicide for the Control of Wild Oat in Wheat, including Durum

# **ACTIVE INGREDIENT:**

Mesosulfuron-Methyl* (CAS No.: 208465-21-8)	
INERT INGREDIENTS:	
Protected by U.S. Patent No. 5,648,315 and 5,688,745	TOTAL: 100.0%

\*This product is a water dispersible granule containing 2% of active ingredient, Mesosulfuron-Methyl, by weight.

# E.P.A. Reg. No. 264-801

E.P.A. Est. No.

# KEEP OUT OF REACH OF CHILDREN WARNING - AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-866-99BAYER (1-866-992-2937)

# FIRST AID

IF IN EYES:	Hold eye open and rinse slowly and gently with water for 15-20 minutes.	
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.	ACCEPTED
	Call a poison control center or doctor for treatment advice.	with COMMENTS
IF SWALLOWED:	Immediately call a poison control center or doctor for treatment advice.	In EPA Letter Dated:
	• Do not induce vomiting unless told to do so by a poison control center or doctor.	AUG 1 7 2010
	Have person sip a glass of water if able to swallow.	Under the Federal II. Scide.
	Do not give anything by mouth to an unconscious or convulsing person.	is amended, for the pesticide
IF ON SKIN OR	Take off contaminated clothing.	egistered under EPA Reg. No
CLOTHING:	Rinse skin immediately with plenty of water for 15-20 minutes.	264-801
	Call a poison control center or doctor for treatment advice.	201001
	For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577.	

# PRECAUTIONARY STATEMENTS

# WARNING HAZARD TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed or absorbed through skin. Causes substantial but temporary eye injury. Avoid contact with skin, eyes or clothing. Wear protective eyewear (safety glasses).

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear: Long-sleeved shirt and long pants, socks, shoes, chemical resistant gloves such as barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, or neoprene rubber  $\geq$  14 mils and protective eyewear (safety glasses).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

# ENGINEERING CONTROL STATEMENT

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

# **USER SAFETY RECOMMENDATIONS**

#### Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove Personal Protective Equipment immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

## **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate any body of water and do not apply when/where conditions could favor runoff. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not use this product until you have read the entire label.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

# AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated such as plants, soil or water, is coveralls, socks, shoes, chemical resistant gloves such as barrier laminate, butyl rubber  $\geq$  14 mils, nitrile rubber  $\geq$  14 mils, or neoprene rubber  $\geq$  14 mils, and protective eye wear.

# STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Store in a cool, dry place.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

# **GENERAL INFORMATION**

SILVERADO<sup>™</sup> Wild Oat Herbicide is used as a foliar spray in wheat for the control of wild oat and wild mustard. This product requires the addition of an adjuvant as specified in this label.

# ENVIRONMENTAL AND BIOLOGICAL ACTIVITY

SILVERADO<sup>™</sup> Wild Oat Herbicide is absorbed through the foliage of plants, rapidly inhibiting growth of susceptible weeds. Visual symptoms progress from yellowing to necrosis of the growing point and eventual plant death.

Best weed control is obtained when SILVERADO<sup>™</sup> Wild Oat Herbicide is applied to young actively growing weeds in vigorously growing wheat that will shade competitive weeds. Abnormal environmental conditions (excess soil moisture or drought, extreme cold weather) can influence crop tolerance and herbicidal activity and may cause temporary damage to the crop or reduce levels of weed control. This may result in weed stunting, rather than weed death. However, weed competition will be greatly reduced, and should permit normal crop development.

#### **APPLICATION TIMING**

#### Weed Application Timing

SILVERADO<sup>™</sup> Wild Oat Herbicide is a postemergence herbicide and best results are obtained when applications are made to young actively growing weeds. For wild oat control, the weed application timing is from 1-leaf to the 2-tiller stage of growth. See weed tables for appropriate application timing and weed size. Treat heavy weed infestations before they become competitive with the crop.

#### Wheat Timing

Apply SILVERADO™ to wheat from emergence up to the jointing stage of growth.

#### SPRAY ADDITIVES

SILVERADO<sup>™</sup> Wild Oat Herbicide is a water dispersible granule that does not include an adjuvant. An adjuvant **must** be tank mixed with SILVERADO<sup>™</sup> according to the guidelines as described in the **Mixing Order** section.

Application of SILVERADO<sup>™</sup> Wild Oat Herbicide must include either a methylated seed oil, MSO basic blend or a basic blend type adjuvant. Use a high quality methylated seed oil (MSO) with 10% emulsifier or greater at 1.5 pt/A. An ammonium nitrogen fertilizer may be added to the methylated seed oil to improve weed control, particularly under adverse conditions. Use only spray grade quality urea ammonium nitrogen fertilizer (28-0-0 or 30-0-0 or 32-0-0 at 1 – 2 qt/acre) or ammonium sulfate fertilizer (21-0-0-24 at 1.5 – 3 lbs/acre). When ammonium nitrogen fertilizer is used in tank mixture with SILVERADO<sup>™</sup>, transient leaf burn may occur. Do not use ammonium nitrogen fertilizers without either a methylated seed oil, MSO basic blend or basic blend type adjuvant.

Do not use additives that alter the spray solution below 6.0 pH. Best results are obtained at spray solution pH of 6.0 - 8.0.

### Methylated Seed Oil (MSO)

Apply a methylated seed oil in tank mixture with SILVERADO<sup>™</sup> at a rate of 1.5 pt /A in spray volumes of 10 gallons or more per acre. In special circumstances when SILVERADO<sup>™</sup> Wild Oat Herbicide is tank mixed with a pesticide that restricts the addition of a methylated seed oil, a non-ionic based basic blend adjuvant should be used instead.

#### **MSO Basic Blend Adjuvants**

Apply MSO Basic Blend adjuvants at a rate of 2% v/v in spray solution volumes of 10 gallons or more per acre. Use a minimum of 1.5 pt /A of MSO Basic Blend in tank mixture with SILVERADO™.

#### **Basic Blend Adjuvants**

Select a Basic Blend adjuvant that is a formulated combination of a non-ionic surfactant or a methylated oil and a nitrogen source. Use a Basic Blend adjuvant at 1% v/v or 0.8 – 1.6 pt/A depending on water carrier volume per acre in tank mixture with SILVERADO<sup>TM</sup>. Select the appropriate amount of basic blend adjuvant per acre depending on local conditions but do not apply less Basic Blend adjuvant than 0.8 pt/A.

#### **APPLICATION METHODS**

Uniform, thorough spray coverage is important to achieve consistent weed control. For best results, use nozzles that deliver 200 – 350 micron size droplets providing optimum spray coverage. Do not use flood-jet nozzles, controlled droplet application equipment, or cone nozzles.

#### Ground Application

SILVERADO<sup>™</sup> Wild Oat Herbicide can be applied broadcast in 10 - 20 gallons of water per acre. For weed control in dense weed canopies, use 15 to 20 gallons of water per acre. Weed infestations should be treated before they become competitive with the crop.

The use of 80-degree or 110-degree flat-fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Use a spray pressure of 35 to 40 pounds per square inch (measured at the nozzle). Use screens that are 50 mesh or larger.

Do not apply this product through any type of irrigation system.

#### **Aerial Application**

Calibrate the spray equipment prior to use. SILVERADO<sup>™</sup> Wild Oat Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray coverage, use nozzles to provide 200 to 350 micron size droplets. DO NOT use raindrop nozzles. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur.

Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

See the Spray Drift Management section of this label for additional information on proper application of SILVERADO™ Wild Oat Herbicide.

# ENDANGERED SPECIES

To avoid adverse effects on endangered dicot species, the following mitigation measures will be required where endangered species occur in Counties listed in the table below.

For ground applications, the applicator must:

- 1. Apply when there is sustained wind away from native plant communities, OR
- 2. Use low-pressure nozzles according to manufacturer's specifications that produce only coarse or very coarse droplets, OR
- 3. Leave 25 foot untreated buffer between treatment area and native plant communities.

For aerial applications, the applicator must:

- 1. Apply only when there is sustained wind away from native plant communities, OR
- 2. Leave 150 foot untreated buffer between treatment area and native plants.

#### SILVERADO Wild Oat Herbicide is not registered for use in the states of Idaho, Oregon, Washington, and Wyoming.

State	County	State	County
Minnesota	Brown	Montana	Flathead
	Cottonwood		Lake
	Goodhue		
	Jackson		
	Renville		

# **MIXING INSTRUCTIONS**

SILVERADO<sup>™</sup> Wild Oat Herbicide must be applied with clean and properly calibrated equipment. Prior to adding SILVERADO<sup>™</sup> Wild Oat Herbicide to the spray tank, ensure that the spray tank, filters and nozzles have been thoroughly cleaned.

#### **Mixing Order**

- 1. Fill the tank 1/4 to 1/3 full of water.
- 2. While agitating, add the required amount of SILVERADO™ Wild Oat Herbicide.
- 3. Continue agitation until the SILVERADO™ is fully dispersed, at least 5 minutes.
- 4. Once SILVERADO<sup>™</sup> is fully dispersed, maintain agitation and continue filling tank with water. It is important that SILVERADO<sup>™</sup> is fully mixed with water before adding any other material.
- 5. As the tank is filling, add the required amount of spray adjuvant (methylated seed oil or basic blend adjuvant) and ammonium nitrogen fertilizer, if desired. Add additional pesticide tank mix partner, if desired.
- Continue agitation during herbicide application to ensure uniform spray coverage. If the mixture is not continuously agitated, settling may occur. If settling occurs, thoroughly re-agitate spray solution for at least 10 minutes before application. Use spray solution within 24 hours after mixing.

#### **RE-SUSPENDING WG PRODUCTS IN SPRAY SOLUTION**

Like other Water Dispersible Granules or suspension concentrates (SC's), SILVERADO™ Wild Oat Herbicide will settle if left standing without agitation. If the spray solution is allowed to settle for one hour or more, re-agitate the spray solution for a minimum of 10 minutes before application.

#### COMPATIBILITY

If SILVERADO<sup>™</sup> Wild Oat Herbicide is to be tank mixed with other herbicides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1qt) of spray solution, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually occur within 5-15 minutes after mixing. Read and follow the label of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions.

# WEED CONTROL RECOMMENDATIONS

# **Rate Recommendation Tables for Weed Control**

Apply SILVERADO<sup>™</sup> Wild Oat Herbicide at a rate of 1.75 – 2.25 ounces per acre in wheat. Weed control at selected weed heights and stages is shown in the following tables.

Weed Species Common Name (Scientific Name)	1.75 – 2.25* ozs/Acre SILVERADO™ Wild Oat Herbicide
	North Dakota, South Dakota, Minnesota and Montana
Wild oat (Avena fatua)	1-leaf to 2-tiller
Mustard, wild (Brassica kaber)	1 - 2 inches
Volunteer Canola (Brassica napus & Brassica rapa)	1 – 2 inches
Green foxtail (Setaria viridis)	Suppression
Persian darnel (Colium persicum)	Suppression
Pigweed, redroot (Amaranthus retroflexus)	Suppression

## Annual Weeds Controlled with SILVERADO™ Wild Oat Herbicide (ounces product/Acre)

\* Under dry conditions, use SILVERADO™ at a dosage of up to 2.25 ozs/acre for best results.

# TANK MIX RECOMMENDATIONS

SILVERADO<sup>™</sup> Wild Oat Herbicide may be tank mixed with the herbicides listed below to provide broad-spectrum weed control. When using SILVERADO<sup>™</sup> in tank mix combinations, follow the precautions and directions of the most restrictive label. SILVERADO<sup>™</sup> Wild Oat Herbicide contains 0.121 pounds of metenpyr-diethyl per pound of product. Applying the maximum labeled rate of SILVERADO<sup>™</sup> Wild Oat Herbicide delivers 0.017 lbs of metenpyr-diethyl per acre. Do not apply more than 0.053 pounds of metenpyr-diethyl per acre per year. It is recommended that herbicides not specifically listed on this label for tank mixing with SILVERADO<sup>™</sup> be applied sequentially, 5 days prior to or 5 days after a SILVERADO<sup>™</sup> Wild Oat Herbicide treatment. Consult appropriate label of each tank mix partner for recommendations regarding application rates required to control weeds not listed on this label.

#### **Tank Mixtures for Additional Weed Control**

Herbicides:

Ally® Extra	Express †	Starane™ †
Buctril® Herbicide *†	Harmony® Extra †	Stinger™ †
Bronate Advanced™ Herbicide *††	Harmony® †	
Curtail™ M	MCPA ester (various) **	

\* Equivalent bromoxynil products may be substituted in a tank mix for these products.

\*\* Various formulations of MCPA Ester may be used at a dosage of 0.25 - 0.375 lb ai/A.

† MCPA Ester may be added as broadleaf tank mix partner at no more than 0.25 - .375 lb ai/A of MCPA Ester in tank mixture with SILVERADO™

†† Do not exceed 0.8 pt/A of Bronate Advanced in combination with SILVERADO™

#### **Tank Mixtures for Disease Control**

SILVERADO<sup>™</sup> Wild Oat Herbicide may be applied in combination with Stratego®, Tilt® or Topsin® M 70WP fungicides for weed and disease control. Refer to the specific fungicide label for use directions, application rates, restrictions and a list of diseases controlled.

#### **Tank Mixtures for Insect Control**

SILVERADO<sup>™</sup> Wild Oat Herbicide may be applied with Sevin® XLR Plus, Warrior® Insecticide with Zeon Technology or Z-Cype 0.8 EC Insecticide. Refer to the specific insecticide label for use directions, application rates, restrictions and a list of insects controlled.

#### **Tank Mix Precautions**

Always follow the label instructions of the tank mix partner as well as SILVERADO<sup>™</sup> Wild Oat Herbicide. Check the compatibility of SILVERADO<sup>™</sup> and the tank mix partner by mixing all components in the order specified in the **Mixing Order** section, including adjuvants and water, into a small separate container in order to evaluate compatibility prior to adding them to the tank.

#### TANK CLEANUP PROCEDURE

- 1. Drain the tank completely, and then wash out tank, boom and hoses with clean water. Drain again.
- Half fill the tank with clean water and add ammonia (i.e., 3% domestic ammonia solution) at a dilution rate of 1% (i.e., 1 gallon of domestic ammonia for every 100 gallons of rinsate). Complete filling of the tank with water. Agitate/recirculate and flush through boom and hoses. Leave agitation on for 10 minutes. Drain tank completely.

#### 3. Repeat step 2.

- 4. Remove nozzles and screens and soak them in a 1% ammonia solution. Inspect nozzles and screens and remove visible residues.
- 5. Flush tank, boom, and hoses with clean water.
- 6. Inspect tank for visible residues. If present, repeat step 2.

# SPRAY DRIFT MANAGEMENT

SILVERADO<sup>™</sup> Wild Oat Herbicide is not volatile. Damage to sensitive crops can occur as a result of spray drift. Spray drift can be managed by several application factors and by spraying under the appropriate climatic conditions. Consequently, avoidance of spray drift is the responsibility of the applicator and grower.

SENSITIVE AREAS: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

Avoiding spray drift at the application site is the responsibility of the applicator and grower. The interaction of many equipment-andweather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

Do not apply under circumstances where possible drift to unprotected persons or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption can occur.

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

- 1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
- 2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.
- 3. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

Where states have more stringent regulations, they shall be observed. The applicator should be familiar with and take into account the information covered in the <u>Aerial Drift Reduction Advisory Information</u>.

#### INFORMATION ON DROPLET SIZE:

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

Uniform, thorough spray coverage is important to achieve consistent weed control. Select nozzles and pressure that deliver MEDIUM spray droplets as indicated in nozzle manufacturer's catalogs and in accordance with ASAE Standard S-572. Nozzles that deliver COARSE spray droplets may be used to reduce spray drift provided spray volume per acre (GPA) is increased to maintain coverage of weeds.

#### **CONTROLLING DROPLET SIZE:**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles
  produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets
  and the lowest drift.

#### BOOM LENGTH:

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

#### **APPLICATION HEIGHT:**

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.

#### SWATH ADJUSTMENT:

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

# WIND:

Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. **NOTE:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

#### TEMPERATURE AND HUMIDITY:

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry. Avoid spraying during conditions of low humidity and/or high temperatures.

#### **TEMPERATURE INVERSIONS:**

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

# **ROTATIONAL CROP INTERVALS**

CROP	ROTATION INTERVAL
Wheat	7 days
Barley	30 days
Sunflowers	30 days
Soybeans	90 days
Lentils	90 days
Dry Beans	90 days
Peas	90 days
Sugarbeets	10 months
Potatoes	10 months
Canola	10 months
Corn	12 months

For all other crops, do not plant for a period of ten months following SILVERADO™ Wild Oat Herbicide application.

# **RESISTANT WEED MANAGEMENT**

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SILVERADO<sup>™</sup> Wild Oat Herbicide is a Group B/2 herbicide. ALS-resistance exists naturally in some weed biotypes. These biotypes may not be controlled by SILVERADO<sup>™</sup> Wild Oat Herbicide. Selection of ALS resistant biotypes, through repeated use of these herbicides in the same field, may result in a lack of weed control. Rotate SILVERADO<sup>™</sup> Wild Oat Herbicide with herbicides with other modes of action, tank mix herbicides with other modes of action and use cultural practices such as crop rotations to reduce or delay the selection of resistant weed populations. A resistant biotype may be present if lack of control cannot be attributed to poor application technique or environmental conditions. Contact your local University personnel or a Bayer CropScience representative for additional information.

# 9

# **PRECAUTIONS FOR USE**

- Use adjuvants as specified on this label with SILVERADO<sup>™</sup> Wild Oat Herbicide.
- Do not apply SILVERADO<sup>™</sup> to crops undersown with grass and legume species.
- SILVERADO<sup>™</sup> is rainfast 4 hours after application to most weed species. Rainfall within 4 hours may result in reduced weed control. Weed control may be reduced if application is made in the presence of heavy dew, fog, and mist/rain.
- Applications should be made to actively growing weeds. Weed control may be reduced when weeds are under stress due to severe weather conditions, drought, very cold temperatures, etc. Weed control may be reduced if the herbicide application is made under dry, dusty conditions – especially in the wheel track areas.
- Do not use liquid nitrogen fertilizer solutions such as 28-0-0 or 30-0-0 or 32-0-0 as the carrier when applying SILVERADO™.
- Varieties of wheat (including Durum) may differ in their response to herbicides. It is recommended that you consult your state
  experiment station, university or local extension agent as to specific varietal sensitivity to any herbicides. If no information is
  available, limit the initial use to a small area.
- Do not make more than one application of SILVERADO<sup>™</sup> in one growing season.
- Do not apply more than 2.25 oz/Acre of SILVERADO<sup>™</sup> in one growing season.
- Do not apply more than 0.053 pounds of metenpyr-diethyl per acre per year.
- Do not apply when wind causes drift to off-site vegetation as injury may occur. Small amounts of SILVERADO<sup>™</sup> via drift or tank contamination can cause severe damage to crops other than wheat. Careful management of spray drift and tank cleanout is required.
- Do not apply SILVERADO<sup>™</sup> within 30 days of harvesting wheat forage, 50 days for hay, and 55 days for grain and straw.
- Do not apply SILVERADO<sup>™</sup> in tank mixture with malathion, mancozeb or methyl parathion as unacceptable crop phytotoxicity may occur.

# **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and should be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience. All such risks shall be assumed by the user or buyer.

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