

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

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Mr. John J. Jachetta, Ph.D. Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268 AUG 26 2010

Subject: Label Amendment Adding Groundwater Advisory and Protective Eyewear to Master Label; Revised Section F for PP 8F7455

Milestone® Specialty Herbicide EPA Reg. No. 62719-519

Your Submission, Dated May 24, 2010, as Amended by Email June 29, 2010

#### Dear Mr.Jachetta:

The revised section F for PP 8F7455, required by EPA in its March 31, 2010 letter, is acceptable and has been placed in the petition file.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable, provided you make the following changes.

- 1. On page 9, below the Storage and Disposal box, insert a heading specifying the use sites to which the subsequent directions for use apply (i.e., "Rangeland, Permanent Grass Pastures, CRP Acres, Non-Cropland Areas, Non-Irrigation Ditch Banks, Natural Areas, and Grazed Areas in and Around These Sites").
- 2. Move the Resistance Management Guidelines section to a position just below the Storage and Disposal Box on page 9, above the directions for use on rangeland, pastures, etc. The Resistance Management Guidelines apply to all uses on the label and should, therefore, not be embedded in the directions for use on rangeland, pastures, etc.
- 3. On page 18, change "should" to "must" in the first sentence of the directions for "Spot Application" on wheat, so that the revised sentence reads "To prevent over-application, spot treatments must be applied at rates and spray volumes equivalent to broadcast application."
- 4. On page 19, under "Use Precautions and Restrictions (Wheat, Including Durum)", revise the last sentence of the first bullet ("Avoiding Injury to Non-Target Plants"). The sentence

currently refers to a "Spray Drift Advisory" under "General Mixing and Application Instructions"; neither of which exists on the label. Revise the sentence to specify the correct sections of the label where spray drift information can be found: "Follow Precautions for Avoiding Spray Drift and the Aerial Drift Reduction Advisory to minimize the potential for spray drift."

- 5. On page 19, under "Use Precautions and Restrictions (Wheat, Including Durum)", revise the first sentence of the fourth bullet, which begins "Do not transfer livestock ...", so that it reads "Do not transfer livestock from treated grazing areas (or livestock fed treated hay) to sensitive broadleaf crop areas without first allowing 3 days of grazing on an untreated pasture (or feeding of untreated hay)." Note: The underlined text is only intended to highlight the changes to the current statement.
- 6. On page 3 of the supplemental label for Postemergence Broadleaf Weed Control in Field Corn and Field Corn Grown for Ensilage, under "Other Precautions and Restrictions", revise the last sentence of the bulleted paragraph "Avoiding Injury to Non-Target Plants". It currently refers to "Precautions for Avoiding Spray Drift" that are only found on the main product label and to the "Spray Drift Advisory" under "General Mixing and Application Instructions", neither of which actually exists on either the main or supplemental label. Revise the sentence to specify the correct sections of the labels where spray drift information can be found: "Follow Precautions for Avoiding Spray Drift on the label affixed to the container for Milestone and the Advisories to minimize drift to non-target sites on this supplemental label."
- 7. On page 3 of the supplemental label for Postemergence Broadleaf Weed Control in Field Corn and Field Corn Grown for Ensilage, under "Other Precautions and Restrictions", revise the first sentence of the 6th bullet, which begins "Do not transfer livestock …", so that it reads "Do not transfer livestock from treated grazing areas (or livestock fed treated hay) to sensitive broadleaf crop areas without first allowing 3 days of grazing on an untreated pasture (or feeding of untreated hay)." Note: The underlined text is only intended to highlight the changes to the current statement.
- 8. Correct the following typographical errors noted during our review:
  - On page 9, in the first line below the Storage and Disposal box, change "controls" to "control".
  - In the first line at the top of page 11, close the parentheses around "7 fl oz". The right parenthesis is missing.
  - On page 11, insert the missing word "area" into the first statement after the eighth bullet, so that it reads "Trees adjacent to or in a treated area can occasionally be affected by root uptake of Milestone."
  - On page 12, in the fourth line under "Sprayer Clean-Out Instructions", change the verb "has" to "have", so that it reads "... all residues of this herbicide <u>have</u> been removed ..."
  - On page 13, in the third line of the Spot Application instructions, close the parentheses around "7 fl oz". The right parenthesis is missing.
  - On page 19, in the first line under "Tank Mixtures (Wheat, Including Durum)", change "improved" to "improve".

EPA Reg. No. 62719-519 Page 3 of 3

A stamped copy of your label is enclosed for your records. This label supersedes all previously accepted labels. You must submit one (1) copy of the final printed label before you release the product for shipment. Products shipped after eighteen (18) months from the date of this letter or the next printing of the label, whichever occurs first, must bear the new revised label. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA §6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Sincerely,

Kathryn Montague Product Manager 23

Herbicide Branch

Registration Division (7505P)

Enclosure

40731

L1B / Milestone / MSTR Amend / 05-04-10

(Base label):

# Milestone<sup>®</sup>

**Specialty Herbicide** 

ACCE. TED with COMMENTS In EPA Letter Dated:
AUG 2 6 2010

Page 1

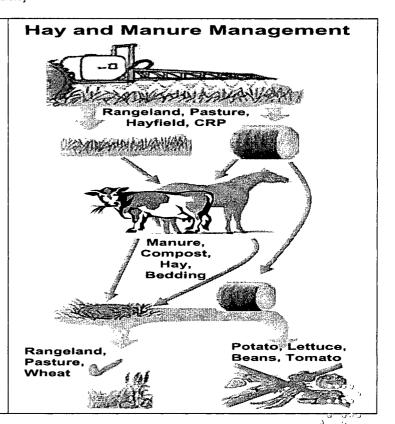
Under the Federal Instaticide, Fungicide, and Rodenucide Act as amended, for the pesticide registered under EPA Reg. No.

62719-519

- For control of susceptible weeds and certain woody plants, including invasive and noxious weeds, on rangeland, permanent grass pastures (including grasses grown for hay), Conservation Reserve Program (CRP) acres, noncropland areas including industrial sites, rights-of-way (such as roadsides, electric utility and communication transmission lines, pipelines, and railroads), non-irrigation ditch banks, natural areas (such as wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites.
- For control of annual and perennial broadleaf weeds in wheat (including spring wheat, winter wheat, and durum).

# IMPORTANT ADVISORY TO PREVENT INJURY TO DESIRABLE PLANTS

- It is mandatory to follow the "Use Precautions and Restrictions" section of this product label.
- Carefully read the section "Plant Residues or Manure."
- Manure and urine from animals consuming treated grass or hay may contain enough aminopyralid to cause injury to sensitive broadleaf plants.
- Inform the recipient of hay or manure from animals grazing pastures or feeding on hay from areas treated with aminopyralid of the label use precautions and restrictions.
- Consult with a Dow AgroSciences representative if you do not understand the "Use Precautions and Restrictions". Call [1-(800) 263-1196] Customer Information Group.



Not For Sale, Distribution, or Use in New York State.

GROUP

4

HERBICIDE

Active Ingredient:

Triisopropanolammonium salt of 2-pyridine carboxylic acid, 4-amino-3,6-dichloro-.....40.6%

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Acid Equivalent: aminopyralid (2-pyridine carboxylic acid, 4-amino-3,6-dichloro-) - 21.1% - 2 lb/gal

[Editor's Note: The following Container Use Directions should be included on the label for product that is packaged in a 1 quart Tip and Dispense bottle]

#### **Container Use Directions**







## Keep Out of Reach of Children

## **CAUTION**

## **Precautionary Statements**

#### **Hazard to Humans and Domestic Animals**

**Causes Moderate Eye Irritation** 

Avoid contact with eyes or clothing.

#### **Personal Protective Equipment (PPE)**

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Shoes plus socks

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.

#### **User Safety Recommendations**

Users should:

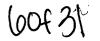
- · Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

#### **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. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

50431



#### **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 water when disposing of equipment washwater or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the "Directions for Use" section for information about this standard.

#### Nonrefillable containers 5 gallons or less:

#### Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited. **Pesticide Storage:** If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized active ingredient prior to use.

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

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure 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. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

#### Refillable containers larger than 5 gallons:

#### Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited. **Pesticide Storage:** If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized active ingredient prior to use.

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

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### Nonrefillable containers larger than 5 gallons:

#### Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited. **Pesticide Storage:** If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized active ingredient prior to use.

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

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

#### Refer to label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

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

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®Trademark	of Dow	AgroScience	s LLC

Produced for Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

EPA Reg. No. 62719-519

EPA Est.

Net Contents \_\_

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(cover):

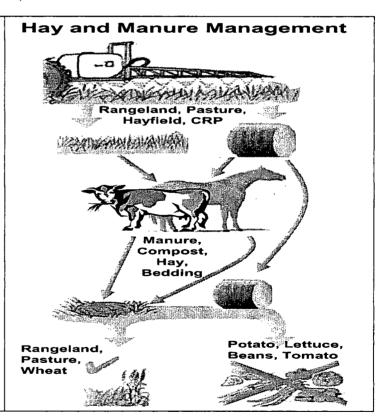
## Milestone<sup>®</sup>

### **Specialty Herbicide**

- For control of susceptible weeds and certain woody plants, including invasive and noxious weeds, on rangeland, permanent grass pastures (including grasses grown for hay), Conservation Reserve Program (CRP) acres, noncropland areas including industrial sites, rights-of-way (such as roadsides, electric utility and communication transmission lines, pipelines, and railroads), non-irrigation ditch banks, natural areas (such as wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites.
- For control of annual and perennial broadleaf weeds in wheat (including spring wheat, winter wheat, and durum).

# IMPORTANT ADVISORY TO PREVENT INJURY TO DESIRABLE PLANTS

- It is mandatory to follow the "Use Precautions and Restrictions" section of this product label.
- Carefully read the section "Plant Residues or Manure."
- Manure and urine from animals consuming treated grass or hay may contain enough aminopyralid to cause injury to sensitive broadleaf plants.
- Inform the recipient of hay or manure from animals grazing pastures or feeding on hay from areas treated with aminopyralid of the label use precautions and restrictions.
- Consult with a Dow AgroSciences representative if you do not understand the "Use Precautions and Restrictions". Call [1-(800) 263-1196] Customer Information Group.



Not For Sale, Distribution, or Use in New York State.

GROUP 4 HERBICIDE

Active Ingredient:

Triisopropanolammonium salt of 2-pyridine carboxylic acid, 4-amino-3,6-dichloro-......40.6%

1	1B	/ Milestone	/ MSTR	Amend	/ 05-04-10

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Other Ingredients Total	
Acid Equivalent: aminopyralid (2-pyridine	carboxylic acid, 4-amino-3,6-dichloro-) - 21.1% - 2 lb/gal

## Keep Out of Reach of Children

## **CAUTION**

#### **Agricultural Use Requirements**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to label booklet under "Agricultural Use Requirements" in the "Directions for Use" section for information about this standard.

#### Refer to inside of label booklet for Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies at end of label booklet. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-800-992-5994.

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

EPA Reg. No. 62719-519

EPA Est.

Produced for Dow AgroSciences LLC 9330 Zionsville Road Indianapolis, IN 46268

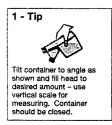
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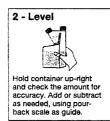
Trademark of Dow AgroSciences LLC

(Page 1 through end):

[Editor's Note: The following Container Use Directions should be included on the label for product that is packaged in a 1 quart Tip and Dispense bottle]

#### **Container Use Directions**







## **Precautionary Statements**

Hazards to Humans and Domestic Animals

## CAUTION

**Causes Moderate Eye Irritation** 

Avoid contact with eyes or clothing.

#### Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Shoes plus socks

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.

#### **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.

#### 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. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.

#### **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 water when disposing of equipment washwater or rinsate.



This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### **Directions for Use**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

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.

Not For Sale, Distribution, or Use in New York State.

#### **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 interval. 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 48 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
- Chemical-resistant gloves made of any waterproof material as polyethylene or polyvinyl chloride
- Shoes plus socks
- Protective eyewear

#### **Non-Agricultural Use Requirements**

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for Agricultural Pesticides (40 CFR Part 170). The WPS does not pertain to non-agricultural use on sites, such as, rangeland, permanent grass pastures, or non-cropland. See the Agricultural Use Requirements section below for information where the WPS applies.

**Entry Restrictions for Non-WPS Uses:** For applications on rangeland and permanent grass pastures (not harvested for hay) and non-cropland areas, do not enter or allow worker entry into treated areas until sprays have dried.

#### Storage and Disposal

Do not contaminate water, food, feed or fertilizer by storage or disposal. Open dumping is prohibited. **Pesticide Storage:** If this product is exposed to subfreezing temperatures, the active ingredient may crystallize and settle out of solution. Under these conditions the product should be warmed to at least 40°F and agitated well to dissolve any crystallized active ingredient prior to use.

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

#### Nonrefillable containers 5 gallons or less:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.



Triple rinse or pressure 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. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

#### Refillable containers larger than 5 gallons:

**Container Handling:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### Nonrefillable containers larger than 5 gallons:

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse** as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse** as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Milestone™ specialty herbicide may be applied by aerial or ground equipment to controls susceptible broadleaf weeds and certain woody plants, including invasive and noxious weeds on rangeland, permanent grass pastures (including grasses grown for hay), CRP acres, non-cropland areas including industrial sites, rights-of-way (such as roadsides, electric utility and communication transmission lines, pipelines, and railroads), non-irrigation ditch banks, natural areas (such as wildlife management areas, wildlife openings, wildlife habitats, recreation areas, campgrounds, trailheads and trails), and grazed areas in and around these sites without injury to most grasses.

It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs) and transitional areas between upland and lowland sites. Milestone can be used to the waters edge. Do not apply directly to water and take precautions to minimize spray drift onto water.

#### **Resistance Management Guidelines**

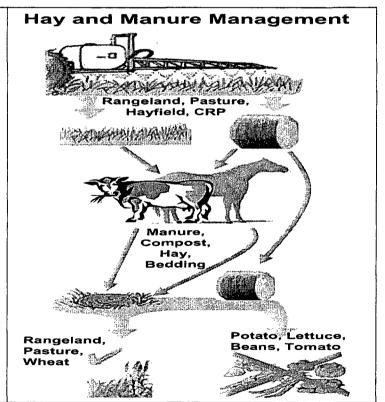
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- Development of plant populations resistant to this herbicide mode of action is usually not a problem on rangeland, permanent grass pastures, Conservation Reserve Program (CRP), or non-cropland sites since these sites receive infrequent pesticide applications.
- In croplands, use an effective integrated pest management (IPM) program, integrating tillage or other mechanical methods, crop rotation or other cultural control methods into weed control programs whenever practical.
- Similar looking biotypes of a given weed species occurring in a treated area may vary in their susceptibility to a herbicide. Application of a herbicide below its labeled rate may allow more tolerant weeds to survive and a shift to more tolerant biotypes within the treated area.
- Where identified, spreading of resistant weeds to other fields may be prevented by cleaning harvesting and tillage equipment before moving to other areas and by planting weed-free seed.
- Contact your extension specialist, certified crop consultant, or Dow AgroSciences representative for the latest resistance management information.

#### **Use Precautions and Restrictions**

Consult with a Dow AgroSciences representative if you do not understand the "Use Precautions and Restrictions." Call (1-800-263-1196) for more information.

# IMPORTANT ADVISORY TO PREVENT INJURY TO DESIRABLE PLANTS

- It is mandatory to follow the "Use Precautions and Restrictions" section of this product label.
- Carefully read the section "Plant Residues or Manure."
- Manure and urine from animals consuming treated grass or hay may contain enough aminopyralid to cause injury to sensitive broadleaf plants.
- Inform the recipient of hay or manure from animals grazing pastures or feeding on hay from areas treated with aminopyralid of the label use precautions and restrictions.



**Maximum Application Rate:** On all labeled use sites do not broadcast apply more than 7 fl oz per acre of Milestone per year. The total amount of Milestone applied broadcast, as a re-treatment, and/or spot treatment cannot exceed 7 fl oz per acre per year. Spot treatments may be applied at an equivalent broadcast rate of up to 0.22 lb acid equivalent (14 fl oz of Milestone) per acre per annual growing season; however, not more than 50% of an acre may be treated at that rate. Do not apply more than a total of

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0.11 lb acid equivalent (7 fl oz per acre of Milestone per annual growing season as a result of broadcast, spot or repeat applications.

- Avoiding Injury to Non-Target Plants: Do not aerially apply Milestone within 50 feet of a border downwind (in the direction of wind movement), or allow spray drift to come in contact with, any broadleaf crop or other desirable broadleaf plants, including, but not limited to, alfalfa, cotton, dry beans, flowers, grapes, lettuce, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes or other broadleaf or vegetable crop, fruit trees, ornamental plants, or soil where sensitive crops are growing or will be planted. Avoid application under conditions that may allow spray drift because very small quantities of spray may seriously injure susceptible crops. Read and consider the "Precautions for Avoiding Spray Drift and Spray Drift Advisory" at the end of this label to help minimize the potential for spray drift.
- **Milestone is highly active against many broadleaf plant species.** Do not use this product on areas where loss of broadleaf plants, including legumes, cannot be tolerated.
- . Do not use on grasses grown for hay intended for export.
- Do not use on grasses grown for seed production.
- Chemigation: Do not apply this product through any type of irrigation system.
- **Do not contaminate water intended for irrigation or domestic purposes.** Do not treat inside banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water that may be used for irrigation or domestic purposes.
- Do not apply this product on residential or commercial lawns or ornamental plantings.
- Trees adjacent to or in a treated can occasionally be affected by root uptake of Milestone. Do not
  apply Milestone within the root zone of desirable trees unless such injury can be tolerated. Use
  special caution near roses, and leguminous trees such as locusts, redbud, mimosa, and caragana.
- · Seeding grasses:
  - Preemergence: Milestone may be applied in the spring or early summer, depending on the target weed species, and grass planted in the fall when conditions are favorable for grass establishment.
  - Postemergence: During the season of establishment, Milestone should be applied only after perennial grasses are well established (have developed a good secondary root system and show good vigor. Most perennial grasses are tolerant to Milestone at this stage of development. Milestone may suppress certain established grasses, such as smooth bromegrass (*Bromus inermis*), especially when plants are stressed by adverse environmental conditions. Plants should recover from this transient suppression with the onset of environmental conditions favorable to grass growth and upon release from weed competition.
- Seeding Legumes: Do not plant forage legumes until a soil bioassay has been conducted to
  determine if aminopyralid concentration remaining in the soil will adversely affect the legume
  establishment.
- Grazing and Haying Restrictions: There are no restrictions on grazing or grass hay harvest following application of Milestone at labeled rates. Cutting hay too soon after spraying weeds will reduce weed control. Wait 14 days after herbicide application to cut grass hay to allow herbicide to work. Do not transfer grazing animals from areas treated with Milestone to areas where sensitive broadleaf crops occur without first allowing 3 days of grazing on an untreated pasture. Otherwise, urine and manure may contain enough aminopyralid to cause injury to sensitive broadleaf plants.
- Grazing Poisonous Plants: Herbicide application may increase palatability of certain poisonous plants. Do not graze treated areas until poisonous plants are dry and no longer palatable to livestock.

#### • Plant Residues or Manure:

- Do not use aminopyralid-treated plant residues, including hay or straw from treated areas, or manure from animals that have grazed forage or eaten hay harvested from treated areas within the previous 3 days, in compost or mulch that will be applied to areas where commercially grown mushrooms or susceptible broadleaf plants may be grown.
- Do not spread manure from animals that have grazed or consumed forage or eaten hay from treated areas within the previous 3 days on land used for growing susceptible broadleaf crops.

- Manure from animals that have grazed forage or eaten hay harvested from aminopyralid-treated areas within the previous 3 days may only be used on pasture grasses, grass grown for seed, and wheat.
- Do not plant a broadleaf crop in fields treated in the previous year with manure from animals that have grazed forage or eaten hay harvested from aminopyralid-treated areas until an adequately sensitive field bioassay is conducted to determine that the aminopyralid concentration in the soil is at level that is not injurious to the crop to be planted.
- To promote herbicide decomposition, plant residues should be evenly incorporated in the surface soil or burned. Breakdown of aminopyralid in plant residues or manure is more rapid under warm, moist soil conditions and may be enhanced by supplemental irrigation.
- Crop Rotation: Do not rotate to any crop from rangeland, permanent pasture or CRP acres within
  one year following treatment. Do not plant a broadleaf crop until an adequately sensitive field
  bioassay shows that the level of aminopyralid present in the soil will not adversely affect that
  broadleaf crop.

Field Bioassay Instructions: In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample variability in field conditions such as soil texture, soil organic matter, soil pH, rainfall pattern or drainage. The field bioassay can be initiated at any time between harvest of the treated crop and the planting of the intended rotational crop. Observe the test crop for symptoms of herbicidal activity, such as poor stand (effect on seed germination), chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, do not plant the field to the intended rotational crop; plant only to wheat, forage grasses, native grasses or grasses grown for hay.

#### **Sprayer Clean-Out Instructions**

It is recommended to use separate spray equipment on highly sensitive crops such as tobacco, soybeans, peanuts and tomatoes.

Do not use spray equipment used to apply Milestone for other applications to land planted to, or to be planted to, broadleaf plants unless it has been determined that all residues of this herbicide has been removed by thorough cleaning of equipment.

Equipment used to apply Milestone should be thoroughly cleaned before reusing to apply any other chemicals as follows:

- 1. Rinse and flush application equipment thoroughly after use. Dispose of rinse water in non-cropland area away from water supplies.
- 2. Rinse a second time, adding 1 quart of household ammonia or tank cleaning agent for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15 to 20 minutes). Let the solution stand for several hours, preferably overnight.
- 3. Flush the solution out of the spray tank through the boom.
- 4. Rinse the system twice with clean water, recirculating and draining each time.
- 5. Spray nozzles and screens should be removed and cleaned separately.
- Do not apply this product with mist blower systems that deliver very fine spray droplets. Use of mist blower equipment can reduce control achieved with the herbicide and increase spray drift potential.

#### **Application Methods**

Apply the specified rate of Milestone as a coarse low-pressure spray. Do not apply this product with mist blower systems that deliver very fine spray droplets. Spray volume should be sufficient to uniformly cover foliage. Increase spray volume to ensure thorough and uniform coverage when target vegetation is tall and/or dense. To enhance foliage wetting and coverage, an approved non-ionic agricultural surfactant may be added to the spray mixture as specified by the surfactant label.

**Ground Broadcast Application:** Higher spray volumes (greater than 10 gallons per acre) generally provide better coverage and better control, particularly in dense and/or tall foliage.

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**Aerial Broadcast Application:** Do not apply less than 2 gallons per acre total spray volume. Five gallons per acre or greater will generally provide better coverage and better control, particularly in dense and/or tall foliage.

**High-Volume Foliar Application:** High volume foliar treatments may be applied at rates equivalent to broadcast up to a maximum of 7 fl oz per acre per annual growing season. Use sufficient spray volume to thoroughly and uniformly wet foliage and stems.

**Spot Application:** Spot treatments may be applied at an equivalent broadcast rate of up to 0.22 lb acid equivalent (14 fl oz of Milestone) per acre per annual growing season; however, not more than 50% of an acre may be treated at that rate. Do not apply more than a total of 0.11 lb acid equivalent (7 fl oz per acre of Milestone per annual growing season as a result of broadcast, spot or repeat applications.) Spray volume should be sufficient to thoroughly and uniformly wet weed foliage, but not to the point of runoff. Repeat treatments may be made, but the total amount of Milestone applied must not exceed 7 fl oz per acre per year. To prevent misapplication, spot treatments should be applied with a calibrated sprayer.

Note: Table 1 below shows mixes for various sprayer outputs in gallons per acre (GPA).

Table 1: Amount of Milestone (in mL) to mix in 1 gallon of water

Gallons per acre	Milestone amount (in mL) to mix with various application rates			
GPA	5 fl oz/a	7 fl oz/a	14 fl oz/a	
20	7.5	10.5	21.0	
30	5.0	7.0	14.0	
40	3.8	5.3	10.5	
50	3.0	4.2	8.4	
60	2.5	3.5	7.0	
70	2.1	3.0	6.0	
80	1.9	2.6	5.3	
90	1.7	2.3	4.7	
100	1.5	2.1	4.2	

Use a syringe to measure cc

#### Conversions:

1 tsp = 5 mL 30 ml = 1 fluid ounce 1 cc = 1 mL

3 tsp = 1 Tbsp 2 Tbsp = 1 fluid ounce

**Table 2:** Application rates in the table below are based on treating an area of 1000 sq ft. An area of 1000 sq ft is about 10.5 by 10.5 yards in size. Mix the amount of Milestone (fl oz or milliliters) corresponding to the desired broadcast rate in 0.5 to 2.5 gallons of water, depending upon the spray volume required to treat 1000 sq ft. A delivery volume of 0.5 to 2.5 gallons per 1000 sq ft is equivalent to 22 to 109 gallons per acre.

Table 2: Amount of Milestone per 1000 sq ft to Equal Broadcast Rate

Amount of Milestone per 1000 sq ft to Equal Broadcast Rate				
Broadcast Rate Amount of Milestone per 1000 so (fl oz/acre)				
	(fl oz)	(Milliliters)		
3	0.069	2		
5	0.115	3.4		
7	0.161	4.8		

Note: 1 fluid ounce (fl oz) = 29.6 milliliters (mL) = 2 tablespoons = 6 teaspoons

To calculate the amount of Milestone for areas larger than 1000 sq ft: Multiply the table value (fl oz or milliliters) by the area to be treated in "thousands" of square feet. For example, if the area to be treated is 3500 sq ft, multiply the table value by 3.5 (3500 sq ft divided by 1000 sq ft = 3.5).

#### **Mixing Instructions**

Mixing with Water: To prepare the spray, add about half the required amount of water in the spray tank. Then, with agitation, add the specified amount of Milestone and other registered tank mix herbicides. Finally, with continued agitation, add the rest of the water and additives such as surfactants or drift control and deposition aids.

Addition of Surfactants or Adjuvants on All Labled Use Sites: The addition of a high quality non-ionic surfactant (of at least 80% active ingredient) at 0.25 to 0.5 % volume per volume (1 to 2 quarts per 100 gallons of spray) is recommended to enhance herbicide activity under adverse environmental conditions (such as, high temperature, low relative humidity, drought conditions, dusty plant surfaces) or when weeds are heavily pubescent or more mature.

Tank Mixing with Other Herbicides: Milestone at rates of up to 7 fl oz per acre may be mixed with labeled rates of other herbicides registered for application on all labeled use sites. Milestone may be applied in tank mix combination with labeled rates of other herbicides provided: (1) the tank mix product is labeled for the timing and method of application for the use site to be treated and (2) mixing is not prohibited by the label of the registered tank mixed products, and (3) that the tank mix combination is physically compatible (see tank mix compatibility testing below). When tank mixing, use only in accordance with the restrictions, precautions and limitations on the respective product labels.

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed specified application rates. If products containing the same active ingredient are mixed, do not exceed the maximum allowable active ingredient use rates.
- For direct injection or other spray equipment where the product formulations will be mixed in undiluted form, special care should be taken to ensure tank mix compatibility.
- Always perform a jar test to ensure the compatibility of products to be used in tank mixture.

Tank Mix Compatibility Testing: Perform a jar test prior to mixing in a spray tank to ensure compatibility of Milestone and other pesticides or carriers. Use a clear glass jar with lid and mix ingredients in the same order and proportions as will be used in the spray tank. The mixture is compatible if the materials mix readily when the jar is inverted several times. The mixture should remain stable after standing for 1/2 hour or, if separation occurs, should readily remix if agitated. An incompatible mixture is indicated by separation into distinct layers that do not readily remix when agitated and/or the presence of flakes, precipitates, gels, or heavy oily film in the jar. Use of an appropriate compatibility aid may resolve mix incompatibility. If the mixture is incompatible do not use that tank mix partner in tank mixtures.

Mixing with Sprayable Liquid Fertilizer Solutions: Milestone is usually compatible with liquid fertilizer solutions. It is anticipated that Milestone will not require a compatibility agent for mixing with fertilizers; however, a compatibility test (jar test) should be made prior to mixing. Jar tests are particularly important when a new batch of fertilizer or pesticide is used, when water sources change, or when tank mixture ingredients or concentrations are changed. Compatibility may be determined by mixing the spray components in the desired order and proportions in a clear glass jar before large scale mixing of spray components in the spray tank.

**Note:** The lower the temperature of the liquid fertilizer, the greater the likelihood of mixing problems. Use of a compatibility aid may be required if Milestone is mixed with a 2,4-D-containing product and liquid fertilizer. Mixing Milestone and 2,4-D in N-P or N-P-K liquid fertilizer solutions is more difficult than

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mixing with straight nitrogen fertilizer and should not be attempted without first conducting a successful compatibility jar test. Agitation in the spray tank must be vigorous to be comparable with jar test agitation. Apply the spray mixture the same day it is prepared while maintaining continuous agitation. Rinse the spray tank thoroughly after use.

**Note:** Foliar-applied liquid fertilizers themselves can cause yellowing of the foliage of forage grasses and other vegetation.

#### **Use Rates and Timing**

Milestone may be applied post emergence as a broadcast spray or as a spot application to control weeds including, but not limited to, those listed on this label. When a rate range is given use the higher rate to control weeds at advanced growth stages, or under less than favorable growing conditions, or for longer residual control. Best results are obtained when spray volume is sufficient to provide uniform coverage of treated weeds. For optimum uptake and translocation of Milestone, avoid mowing, haying, shredding, burning or soil disturbance in treated areas for at least 14 days following application.

Milestone also provides preemergence control of emerging seedlings of susceptible weeds, and regrowth of certain perennial weeds following application. Preventing establishment of weeds will depend upon application rate, season of application, and environmental conditions after application.

Milestone can provide long-term control of susceptible weeds. The length of control is dependent upon the application rate, condition and growth stage of target weeds, environmental conditions at and following application, and the density and vigor of competing desirable vegetation. Long-term weed control is most effective where grass vegetation is allowed to recover from overgrazing, drought, etc., and compete with weeds.

Milestone can be an important component of integrated vegetation management programs designed to renovate or restore desired plant communities. To maximize and extend the benefits of weed control provided by Milestone, it is important that other vegetation management practices, including proper grazing management, biological control agents, replanting, fertilization, prescribed fire, etc., be used in appropriate sequences and combinations to further alleviate the adverse effects of weeds on desirable plant species and to promote development of desired plant communities. Agricultural and natural resources specialists with federal and state government agencies can provide guidance on best management practices and development of integrated vegetation management programs.

#### **Weeds Controlled**

The following weeds will be controlled with the rates of Milestone indicated below (table 3). For best results, most weeds should be treated when they are actively growing and under conditions favorable for growth. Use a higher rate in the rate range when growing conditions are less than favorable or when weed foliage is tall and dense, or when residual control is desired. Milestone also provides preemergence control of germinating seeds or seedlings of susceptible weeds following application.

Table 3: Weeds Controlled

Note: Numbers in parentheses (-) refer to specific use directions for a particular weeds species.

Common Name	Scientific Name	Rate Range (fl oz/acre)	Life Cycle	Plant Family
amaranth, spiny	Amaranthus spinosus	4 to 7	annual	Amaranthaceae
bedstraw	Galium spp.	4 to 7	perennial	Rubiaceae
beggarticks	Bidens spp.	4 to 7	annual	Asteracea
broomweed, annual	Amphiachyris	4 to 7	annual	Asteraceae

burdock, common*,*** Arctium minus					
buttercup, haliry** Ranunculus sardous 4 to 7 annual Ranunculaceae camelihom Alhagi pseudalhagi 5 to 7 perennial Ranunculaceae camelihom Alhagi pseudalhagi 5 to 7 perennial Fabaceae camelihom Alhagi pseudalhagi 5 to 7 perennial Fabaceae chamomile, scentless Matricaria inodora 4 to 7 annual Asteraceae Chicory** Cichorium infybus 4 to 6 perennial Asteraceae Chicory** A to 6 perennial Asteraceae Chickweed Cinquefoli, sulfur (1)**, *** Potentilla recta 4 to 7 perennial Asteraceae Cocklebur Xanthium strumarium 3 to 5 annual Asteraceae Clover Trifolum spp. 5 to 7 perennial Fabaceae Crownvetch Securigera varia 5 to 7 perennial Fabaceae crownvetch Securigera varia 5 to 7 perennial Fabaceae crownvetch Securigera varia 5 to 7 perennial Asteraceae dock, curly** Rumex crispus 4 to 7 perennial Asteraceae dock, curly** Rumex crispus 4 to 7 perennial Asteraceae dock, curly** Rumex crispus 4 to 7 perennial Asteraceae evening primrose, cutleaf fiddleneck, common Amsinckia intermedia 7 annual Boraginaceae (Congrae varia 5 to 7 perennial Asteraceae evening primrose, cutleaf fiddleneck, common Amsinckia intermedia 7 annual Boraginaceae (Congrae boraginaceae) Asteraceae Habave, lakelaf Congrae borateiasis 4 to 7 perennial Asteraceae hawkweed, vange (2)*, *** Hieracium acespitosum 4 to 7 perennial Asteraceae hawkweed, vange (2)*, *** Hieracium acespitosum 4 to 7 perennial Asteraceae hawkweed, vange (2)*, *** Hieracium acespitosum 4 to 7 perennial Asteraceae horseweed (marestall) Congrae anadensis 4 to 7 annual Asteraceae horseweed (marestall) Congrae anadensis 4 to 7 annual Asteraceae horseweed (marestall) Congrae anadensis 5 to 7 perennial Asteraceae horseweed (marestall) Congrae anadensis 7 perennial Asteraceae horseweed (marestall) Congrae anadensis 7 perennial Asteraceae horseweed (marestall) Congrae anadensis 7 perennial Asteraceae Condition Polygonum persicaria 15 to 7 perennial Asteraceae Conditions 8		dracunculoides			
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croton, tropic         Croton glandulosus         3 to 5         annual         Euphorbiaceae           crownvetch         Securigera varia         5 to 7         perennial         Fabaceae           cudwed, purple         Gamochaeta purpurea         4 to 7         perennial         Asteraceae           dalsy, oxeye (1)*, ***         Leucanthemum vulgare         4 to 7         perennial         Asteraceae           dock, curly*         Rumex crispus         4 to 7         perennial         Polygonaceae           evening primrose, cutleaf         Cenothera laciniata         4 to 7         annual         Donagraceae           fiedleneck, common         Aminckia intermedia         7         annual         Boraginaceae           fiedbane, flax-leaf         Conyza bonariensis         4 to 7         perennial         Asteraceae           hawkweed, orange (2)*, *** Hieracium caespitosum         4 to 7         perennial         Asteraceae           henbit*         Lamium amplexicaule         5 to 7         perennial         Asteraceae           horsenettle, Carolina**         Solanum carolinense         4 to 7         perennial         Asteraceae           horsewed (marestail)         Conyza canadensis         4 to 7         perennial         Asteraceae           knapweed, di	cocklebur	Xanthium strumarium	3 to 5	annual	Asteraceae
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fiddleneck, common		Rumex crispus	4 to 7	perennial	Polygonaceae
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		Ambrosia psilostachya	<del></del>	perennial	<del></del>



ragwort, tansy*, **	Senecio jacobaea	5 to 7	perennial	Asteraceae
redbud	Cercis Canadensis	7	woody	Fabaceae
			perennial	
rush skeletonweed	Chondrilla juncea	5 to 7	perennial	Asteraceae
smartweed, Pennsylvania	Polygonum	3 to 5	annual	Polygonaceae
	pensylvanicum			
sneezeweed, bitter	Helenium amarum	4 to 7	annual	Asteraceae
soda apple, tropical (6)*, **	Solanum viarum	5 to 7	perennial	Solanaceae
sowthistle, perennial*, **	Sonchus arvensis	3 to 5	perennial	Asteraceae
spanishneedles	Bidens bipinnata	4 to 7	annual	Asteraceae
St. Johnswort, common	Hypericum perforatum	5 to 7	perennial	Clusiaceae
star-thistle, Malta (7) *,**	Centaurea melitensis	3 to 5	annual	Asteraceae
starthirstle, purple (7) *.**	Centaurea calcitrapa	3 to 5	biennial	Asteraceae
star thistle, yellow (7)*, **	Centaurea solstitialis	3 to 5	annual	Asteraceae
sunflower, common	Helianthus annuus	4 to 7	annual	Asteraceae
teasel	Dipsacus spp.	4 to 7	biennial	Dipsacaceae
thistle, artichoke	Cynara cardunculus	5 to 7	perennial	Asteracea
thistle, bull (8)*, **	Cirsium vulgare	3 to 5	biennial	Asteraceae
thistle, Canada (9)*, **	Cirsium arvense	5 to 7	perennial	Asteraceae
thistle, woolly distaff	Carthamus lanatus	4 to 7	annual	Asteraceae
thistle, Italian	Carduus pycnocephalus	7	annual	Asteraceae
thistle, musk (8)*, **	Carduus nutans	3 to 5	biennial	Asteraceae
thistle, plumeless (8)*, **	Carduus acanthoides	3 to 5	biennial	Asteraceae
thistle, Scotch*, **	Onopordum acanthium	5 to 7	biennial	Asteracea
vetch	Vicia spp.	3 to 7	perennial	Fabaceae
wisteria	Wisteria brachybotris	7	woody	Fabaceae
			perennial	
wormwood, absinth(10)*, **	Artemisia absinthium	6 to 7	perennial	Asteraceae
yarrow, common	Achillea millefolium	7	perennial	Asteraceae

<sup>\*</sup>Invasive plants are introduced species that are indicated to be invasive in the USDA-NRCS, PLANTS Database (http://plants.usda.gov/index.html).

- (1) **Sulfur cinquefoil or oxeye daisy:** Apply Milestone at 4 to 6 fl oz per acre to plants in the prebud stage of development.
- (2) Orange or yellow hawkweeds: Apply Milestone at 4 to 7 fl oz per acre to plants in the bolting stage of development.
- (3) **Diffuse and spotted knapweeds:** Apply Milestone at 5 to 7 fl oz per acre when plants are actively growing with the optimum time of application occurring from rosette to the bolting stages of development or in the fall. Plants will be controlled by mid-summer and fall applications even though plants may not show any changes in form or stature the year of application.
- (4) **Russian knapweed:** Apply Milestone at 5 to 7 fl oz per acre to plants in the spring and summer to plants from early bud to flowering stage and to dormant plants in the fall.
- (5) Mullein: Apply to the rosette stage
- (6) **Tropical soda apple:** Apply Milestone at 5 to 7 fl oz per acre at any growth stage, but application by flowering will reduce seed production potential.
- (7) Malta, purple, and Yellow starthistle: Apply Milestone at 3 to 5 fl oz per acre to plants at the rosette through bolting growth stages.
- (8) **Bull, musk, and plumeless thistles:** Apply Milestone at 3 to 5 fl oz per acre in the spring and early summer to rosette or bolting plants or in the fall to seedlings and rosettes. Apply at 4 to 5 fl oz when

<sup>\*\*</sup>Plants designated as noxious weeds in at least one state (PLANTS Database, USDA-NRCS, http://plants.usda.gov/index.html).

- plants are at the late bolt through early flowering growth stages. 2,4-D at 1 lb ae/acre should be tank-mixed with Milestone starting at the late bud stages
- (9) **Canada thistle:** Apply Milestone at 5 to 7 fl oz per acre either in the spring to plants in the prebud to early bud growth stage the goal is to insure all plants have emerged. Applications are also effective in the fall before a killing frost.
- (10) **Absinth wormwood:** Apply 6 to 7 fl oz per acre before wormwood is 12 inches tall. When applying by air on CRP, coverage is important and a minimum of 3 GPA is specified. Remove old duff and litter by fire or mowing for best results

Wheat, Including Durum
(Not Underseeded with a Legume)

Milestone controls annual and perennial broadleaf weeds in wheat (including durum) not underseeded with a legume.

#### **Application Timing and Weeds Controlled**

**Timing to Crop:** Apply as a broadcast treatment to actively growing wheat from the 3 leaf crop growth stage up to early jointing stage (Zadoks scale 30). **Do not use if cereal crop is underseeded with a legume.** 

**Timing to Weeds:** Apply when weeds are actively growing and at specified growth stages. For best results on perennial weeds such as Canada thistle, apply when the majority of the basal leaves have emerged from the soil up to bud stage. Only weeds emerged at the time of application will be controlled. Unfavorable growing conditions such as drought or temperatures near freezing prior to, at, or following time of application may reduce weed control and increase the risk of crop injury at all stages of growth.

**Spot Application:** To prevent over-application, spot treatments should be applied at rates and spray volumes equivalent to broadcast application. For spot application, apply the specified rate in a spray volume of 0.5 gal or more per 1000 sq ft.

Table 4: Weeds Controlled or Suppressed

Note: Numbers in parentheses (-) refer to footnotes below.

Weeds Controlled	Weeds Suppressed <sup>†</sup>	Application Rate
buckwheat, wild (2)	bindweed, field	
chamomile	knotweed	broadcast: 0,57 fl oz/acre
dock, curly	ladysthumb (1)	
grape species	lambsquarters	spot treatment:
horseweed (marestail)	mustard species	0,4 ml/1000 sq ft
lentils, volunteer	pennycress, field	
lettuce, prickly	pigweed species	
mayweed (dogfennel)	smartweed, green (1)	
peas, volunteer	sowthistle, perennial (3)	
sowthistle, annual	thistle, Canada (3)	
sunflower (1)	thistle, Russian	
wormwood, biennial		

- Suppression is considered to be a reduction in weed competition (reduced weed population or vigor) in treated compared to untreated areas. Tank mixing with a labeled herbicide may be required to achieve consistent control of these weeds.
- 1. For best results, apply up to the 2 to 4 leaf stage of growth.
- 2. For best control, apply in the 1 to 3 leaf stage of growth, before vining.
- 3. For best results, apply from rosette to bud (pre-flower) stage of growth.

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**Perennial Weeds:** Milestone will control top growth and inhibit regrowth of perennial weeds during the season of application (season-long control). Milestone may cause a reduction in perennial weed shoot growth in the season following application, but effects may be inconsistent due to variability in size and vigor of perennial root systems and growing conditions.

#### Restrictions:

- Do not apply more than 0.57 fl oz per acre of Milestone per growing season.
- Preharvest Interval: Do not apply within 50 days of harvesting of grain and straw. There is no restriction following application of Milestone on harvest of wheat for hay.

### Tank Mixtures (Wheat, Including Durum)

To broaden the spectrum of weed control or to improved control of certain weeds, Milestone may be tank mixed with labeled rates of other herbicides registered for postemergence application in wheat (table 5). See Tank Mixing Precautions under Mixing Instructions. When tank mixing, do not exceed specified application rates and use only in accordance with the restrictions, precautions and limitations on the respective product labels.

Table 5: Tank Mixtures for Wheat, Including Durum

The following products may be tank mixed with Milestone for improved control of listed weeds:

Tank Mix Product	Broadcast Rate	Additional Weeds Controlled
Starane® herbicide	1/2 pint/acre	kochia, bedstraw (cleavers), chickweed, volunteer flax
2,4-D ester or amine (3.8 lb/gal a.e.)	1/2 to 3/4 pint/acre	lambsquarters, mustard, pigweed, Canada thistle, Russian thistle
MCPA ester or amine (3.8 lb/gal a.e.)	1/2 to 3/4 pint/acre	lambsquarters, mustard
Harmony™ GT herbicide	3/10 oz/acre	lambsquarters, mustard, pigweed, Russian thistle
Express™ XP herbìcide	1/8 to 1/3 oz/acre	mustard, Canada thistle, Russian thistle
Ally™ XP herbicide	1/10 oz/acre	lambsquarters, mustard, pigweed, Russian thistle

#### Use Precautions and Restrictions (Wheat, Including Durum)

- Avoiding Injury to Non-Target Plants: Do not apply Milestone directly to, or allow spray drift to come in contact with, any broadleaf crop or other desirable broadleaf plants, including, but not limited to, cotton, flowers, grapes, lettuce, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes or other broadleaf or vegetable crop, fruit trees, ornamental plants, or soil where sensitive crops will be planted the same season. Avoid application under conditions that may allow spray drift since very small-quantities of spray, which may not be visible, may seriously injure susceptible crops during either active growth periods or dormancy. Follow Precautions for Avoiding Spray Drift and Spray Drift Advisory under General Mixing and Application Instructions to minimize the potential for soray drift.
- Do not contaminate irrigation ditches or water used for domestic purposes.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not transfer livestock from treated grazing areas (or feeding of treated hay) to sensitive broadleaf
  crop areas without first allowing 3 days of grazing on an untreated pasture (or feeding of treated hay).
   If livestock are transferred within less than 3 days of grazing untreated pasture or eating untreated
  hay, urine and manure may contain enough aminopyralid to cause injury to sensitive broadleaf plants.

#### **Crop Rotation Intervals**

Residues of this product in treated plants, including the treated crop or weeds, which have not completely decayed may affect succeeding susceptible crops.

Table 6: Crop Rotation Intervals

Note: Numbers in parenthesis (-) refer to footnotes following tables.

Rotation Crops	Rotation Interval (1) (Months)
wheat (including durum)	0
barley, canola (rapeseed), flax, grasses, field corn, grain sorghum, oats, mustard, popcorn, sweet corn	3
safflower	9
crops not listed	18 (2)

- 1. The above listed crop rotational intervals are based on average annual precipitation, regardless of irrigation practices. Observance of specified crop rotation intervals should result in adequate safety to rotational crops. However, Milestone is dissipated in the soil by microbial activity and the rate of microbial activity is dependent upon several interrelated factors including soil moisture, temperature and organic matter. Therefore, accurate prediction of rotational crop safety is not possible. In areas of low organic matter (<2.0%) and less than 15 inches average annual precipitation, potential for crop injury may be reduced by burning or removal of crop residues, supplemental fall irrigation and deep moldboard plowing prior to planting the sensitive crop.</p>
- 2. Perform a field bioassay prior to planting any broadleaf crops that are not listed. Do not rotate to unlisted crops prior to 18 months following application without a field bioassay.

Field Bioassay Instructions: In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample variability in field conditions such as soil texture, soil organic matter, soil pH, or drainage. The field bioassay can be initiated at any time between harvest of the treated crop and the planting of the intended rotational crop. Observe the test crop for herbicidal activity, such as poor stand (effect on seed germination), chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, do not plant the field to the test rotational crop; plant only a labeled crop or crop listed in table 6 above for which the rotational interval has clearly been met.

#### **Precautions for Avoiding Spray Drift**

Avoid application under conditions that may allow spray drift because very small quantities of spray, which may not be visible, may injure susceptible crops. This product should be applied only when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, non-target crops and other plants) is minimal (e.g., when wind is blowing away from the sensitive areas. A drift control aid may be added to the spray solution to further reduce the potential for drift. If a drift control aid is used, follow the use directions and precautions on the manufacturer's label. Do not use a thickening agent with Microfoil, Thru-Valve booms, or other spray delivery systems that cannot accommodate thickened spray solutions.

**Ground Equipment:** With ground equipment spray drift can be lessened by keeping the spray boom as low as possible; by applying 10 gallons or more of spray per acre; by keeping the operating spray pressures at the manufacturer's specified minimum pressures for the specific nozzle type used (low pressure nozzles are available from spray equipment manufacturers); and by spraying when the wind velocity is low (follow state regulations). Avoid calm conditions which may be conducive to thermal inversions. Direct sprays no higher than the tops of target vegetation and keep spray pressures low enough to provide coarse spray droplets to minimize drift.



**Aerial Application:** Avoid spray drift at the application site. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. Users are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications:

- 1. The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 85% of rotor diameter.
- 2. Nozzles should be pointed backward parallel with the air stream or not pointed downwards more than 45 degrees.

State regulations must be followed.

The applicator should be familiar with and take into account the information covered in the following **Aerial Drift Reduction Advisory**. This information is advisory in nature and does not supersede mandatory label requirements.

#### **Aerial Drift Reduction Advisory**

**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).

#### **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 specified 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 will provide uniform coverage.
- Nozzle Orientation Orient nozzles so that the spray is released parallel to the airstream to produce larger droplets than other orientations. 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:** The distance of the outer most operating nozzles on the boom must not exceed 75% of wingspan or 85% of rotor diameter.

**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.

**Swath Adjustment:** When applications are made with a crosswind, the swath will be displaced downwind. 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 to 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 such



as valleys and ravines can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

**Temperature and Humidity:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Applications should not occur during a local, low level temperature inversion 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 the 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.

#### **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. To the extent permitted by law, otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

## **Warranty Disclaimer**

Dow AgroSciences warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent permitted by law, Dow AgroSciences MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### Inherent Risks of Use

It is impossible to eliminate all risks associated with use of this product. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Dow AgroSciences or the seller. To the extent permitted by law, all such risks shall be assumed by buyer.

#### **Limitation of Remedies**

To the extent permitted by law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Dow AgroSciences' election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

To the extent permitted by law, Dow AgroSciences shall not be liable for losses or damages resulting from handling or use of this product unless Dow AgroSciences is promptly notified of such loss or damage in writing. To the extent permitted by law, in no case shall Dow AgroSciences be liable for consequential or incidental damages or losses.

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EPA accepted	

In EPA Letter Dated: AUG 26 2010

Under the Federal In micide. Fungicide, and Rodenmeide Act

Supplemental Labeling

as amended, for the pesucide registered under EPA Reg. No.



Dow AgroSciences LLC

9330 Zionsville Road

Indianapolis, IN 46268-1054 USA

## Milestone<sup>®</sup>

EPA Reg. No. 62719-519

## For Postemergence Broadleaf Weed Control in Field Corn and Field Corn Grown For Ensilage

#### **ATTENTION**

- It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
- This labeling must be in the possession of the user at the time of application.
- Read the label affixed to the container for Milestone™ herbicide before applying. Carefully follow all precautionary statements and applicable use directions.
- Use of Milestone according to this supplemental labeling is subject to all use precautions and limitations imposed by the label affixed to the container for Milestone.

#### **Directions for Use**

Milestone® herbicide is a selective herbicide for postemergence broadleaf weed control in field corn and field corn grown for ensilage. Postemergence treatments should be applied with water. Absorption of Milestone occurs from both shoot and root uptake. Susceptible weeds exposed to Milestone stop growing and either die or remain non-competitive with the crop. Milestone can provide residual control of susceptible weeds that may emerge after application. Adequate soil moisture is necessary for optimal activation because uptake and translocation of Milestone involves uptake by emerging shoots and/or roots.

- Spray or Spot Applications may not be made after the V6 growth stage (BBCH 16).
- Forage may not be harvested prior to the dent stage of growth.

#### Use Precautions and Restrictions

Maximum Application Rate: Do not exceed a total application rate of 1.7 fluid oz per acre of Milestone in a single crop year. Do not apply greater than 0.57 oz Milestone/A (0.0089 lbae/A) in a single application, or corn injury and reduction of yield may result.

- Do not apply more than 3 applications per year.
- An interval of at least 3 days is required between each application.
- Do not apply by air.

#### **Application Precautions**

- Uneven application of Milestone can result in erratic weed control or crop injury. Over application may result in crop injury or rotational crop damage from soil residue.
- Preharvest Interval: An interval of at least 0 days is required between application of Milestone and field corn harvested for grain. If field corn is grown for forage or ensilage, application must occur before corn reaches 20 inches in height or V6 growth stage (whichever occurs first) and an interval of at least 8 days is required between application and harvest.

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## **Application Timing and Weeds Controlled**

**Timing to Crop:** Apply as a broadcast treatment to actively growing corn before it reaches 20 inches in height or V6 growth stage (whichever occurs first).

**Timing to Weeds:** Apply when weeds are actively growing and at specified growth stages. For best results on perennial weeds, apply when the majority of the basal leaves have emerged from the soil up to bud stage. Unfavorable growing conditions such as drought or temperatures near freezing prior to, at, or following time of application may reduce weed control and increase the risk of crop injury at all stages of growth.

**Spot Application:** To prevent over-application, spot treatments should be applied at rates and spray volumes equivalent to broadcast application. For spot application, apply the specified rate in a spray volume of 0.5 gal or more per 1000 sq ft.

Note: Numbers in parentheses (-) refer to footnotes below.

Weeds Controlled	Weeds Suppressed †	Application Rate
buckwheat, wild (2)	dock, curly	
cocklebur	knotweed	broadcast: 0.57 to 1.7 fl
lentils, volunteer	ladysthumb (1)	oz/acre
lettuce, prickly	lambsquarters	
peas, volunteer	smartweed, green (1)	spot treatment:
sowthistle, annual	sowthistle, perennial (3)	0.4 to 1.2 ml/1000 sq ft
sunflower (1)	thistle, Canada (3)	·
wormwood, biennial		

<sup>&</sup>lt;sup>†</sup> **Suppression** is considered to be a reduction in weed competition (reduced weed population or vigor) in treated compared to untreated areas. Tank mixing with a labeled herbicide may be required to achieve consistent control of these weeds.

- (1) For best results, apply up to the 2 to 4 leaf stage of growth.
- (2) For best control, apply in the 1 to 3 leaf stage of growth, before vining.
- (3) For best results, apply from rosette to bud (pre-flower) stage of growth.

**Perennial Weeds:** Milestone will control top growth and suppress regrowth of perennial weeds during the season of application. Milestone may cause a reduction in perennial weed shoot growth in the season following application, but effects may be inconsistent due to variability in size and vigor of perennial root systems and growing conditions.

#### Tank Mixing

Milestone may be tank mixed or followed by other overlay or postemergence treatments registered for use on corn to broaden the spectrum of weeds controlled. This product may be applied in tank mix combination with labeled rates of other products provided (1) the tank mix product is labeled for the timing and method of application for the use site to be treated; and (2) tank mixing is not prohibited by the label of the tank mix product; and (3) the tank mix combination is compatible as determined by a "jar test" described in the "Tank Mix Compatibility Testing" section below.

#### **Tank Mixing Precautions:**

- Read carefully and follow all applicable use directions, precautions, and limitations on the respective product labels.
- Do not exceed specified application rates. Do not tank mix with another pesticide product that contains
  the same active ingredient as this product unless the label of either tank mix partner specifies the
  maximum dosages that may be used.
- For products packaged in water soluble packaging, do not tank mix with products containing boron or mix in equipment previously used to apply a product mixture containing boron unless the tank and spray

equipment has been adequately cleaned. (See instructions for Sprayer Clean-Out.)

**Tank Mix Compatibility Testing:** A jar test is specified prior to tank mixing to ensure compatibility of Milestone and other pesticides. Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions. Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour. If the mixture balls-up, forms flakes, sludges, jels, oily films or layers, or other precipitates, it is not compatible and the tank-mix combination should not be used.

#### **Other Precautions and Restrictions**

- Do not apply Milestone to sweet corn or popcorn.
- Hybrid Seed Production: Corn inbred lines grown for hybrid seed production may be injured by
  Milestone. Inbred lines should be thoroughly tested for crop tolerance before treating large acreage.
  While growers are not prohibited from using Milestone on seed corn, Dow AgroSciences will not
  accept responsibility for any crop injury arising from the use of Milestone on field corn grown
  for seed.
- Avoiding Injury to Non-Target Plants: Do not apply Milestone directly to, or allow spray drift to come in contact with, any broadleaf crop or other desirable broadleaf plants, including, but not limited to, cotton, flowers, grapes, lettuce, potatoes, radishes, soybeans, sugar beets, sunflowers, tobacco, tomatoes or other broadleaf or vegetable crop, fruit trees, ornamental plants, or soil where sensitive crops will be planted the same season. Avoid application under conditions that may allow spray drift since very small quantities of spray, which may not be visible, may seriously injure susceptible crops during either active growth periods or dormancy. Follow Precautions for Avoiding Spray Drift and Spray Drift Advisory under General Mixing and Application Instructions to minimize the potential for spray drift.
- Do not contaminate irrigation ditches or water used for domestic purposes.
- Chemigation: Do not apply this product through any type of irrigation system.
- Do not transfer livestock from treated grazing areas (or feeding of treated hay) to sensitive broadleaf crop areas without first allowing 3 days of grazing on an untreated pasture (or feeding of treated hay). If livestock are transferred within less than 3 days of grazing untreated pasture or eating untreated hay, urine and manure may contain enough aminopyralid to cause injury to sensitive broadleaf plants.

#### **Crop Rotation Intervals**

Residues of this product in treated plants, including the treated crop or weeds, which have not completely decayed may affect succeeding susceptible crops.

**Note:** Numbers in parenthesis (-) refer to footnotes following tables.

Rotation Crops	Rotation Interval (1) (Months)
wheat	0
grasses, field corn	4
barley, canola (rapeseed), flax, grain sorghum, mustard, oats, sweet corn, popcorn	12
crops not listed	24 (2)

(1) The above listed crop rotational intervals are based on average annual precipitation, regardless of irrigation practices. Observance of specified crop rotation intervals should result in adequate safety to rotational crops. However, Milestone is dissipated in the soil by microbial activity and the rate of microbial activity is dependent upon several interrelated factors including soil moisture, temperature and organic matter. Therefore, accurate prediction of rotational crop safety is not possible. In areas of low organic matter (<2.0%) and less than 15 inches average annual precipitation, potential for crop injury may be reduced by burning or removal of crop residues, supplemental fall irrigation and deep moldboard plowing prior to planting the sensitive crop.</p>

(2) A field bioassay is specified prior to planting any broadleaf crops that are not listed. Do not rotate to unlisted crops prior to 18 months following application without a field bioassay.

**Field Bioassay Instructions:** In fields previously treated with this product, plant short test rows of the intended rotational crop across the original direction of application in a manner to sample variability in field conditions such as soil texture, soil organic matter, soil pH, or drainage. The field bioassay can be initiated at any time between harvest of the treated crop and the planting of the intended rotational crop. Observe the test crop for herbicidal activity, such as poor stand (effect on seed germination), chlorosis (yellowing), and necrosis (dead leaves or shoots), or stunting (reduced growth). If herbicidal symptoms do not occur, the test crop can be grown. If there is apparent herbicidal activity, do not plant the field to the test rotational crop; plant only a labeled crop or crop listed in the table below for which the rotational interval has clearly been met.

- Avoid all direct or indirect contact with non-target plants. Do not apply near desirable vegetation. Allow adequate distance between target area and desirable plants under conditions of application to minimize potential exposure.
- Crop Residues from Treated Areas: Crop residues from treated areas cannot be used for composting or mulching on ground where susceptible crops may be grown the following season. To promote herbicide decomposition, plant material should be evenly incorporated in the soil by tillage or burned. Adequate moisture is also required to promote breakdown of plant residues, which contain aminopyralid.
- **Do not move treated soil.** Avoid situations where soil particles may blow into areas where susceptible crops are grown. The hazard of movement of this product on dust is reduced if treated fields are irrigated or if rain occurs shortly after application.
- Do not apply under conditions that favor runoff or wind erosion of soil containing Milestone to non-target areas. To prevent off-site movement due to runoff or wind erosion:
  - Avoid treating powdery dry or light sandy soils when conditions are favorable for wind erosion. Under these conditions, the soil surface should first be settled by rainfall or irrigation.
  - Do not apply to impervious substrates such as paved or highly compacted surfaces or frozen or snow covered ground.
  - Do not apply to soils when saturated with water.
  - Do not use tail-water from the first flood or furrow irrigation of treated fields to treat nontarget crops unless at least 1/2 inch of rainfall has occurred between application and the first irrigation.
- Do not apply when weather conditions favor drift to non-target sites. Spray drift of Milestone to emerged soybeans or soil to which soybeans will be planted during the same growing season may cause soybean injury.
- Read and follow these Advisories to minimize drift to non-target areas.
  - Minimize drift by using sufficient spray volume to ensure adequate coverage with large-droplet size sprays.
  - Use low pressure application equipment capable of producing a large-droplet spray. Do not use nozzles that produce a fine-droplet spray. Droplet size has been shown to be the single most important factor affecting drift from ground applications.
  - While increasing droplet size does reduce the potential for spray drift, larger droplets do not eliminate drift if environmental or application conditions are inappropriate for application.
  - Use larger capacity nozzles to increase flow rate rather than increasing spray pressure.
  - Keep height of ground-driven spray booms as low as possible above the target to minimize exposure to evaporation and wind while still providing good coverage. Applications made late in the growing season with excessive boom heights drastically increase the potential for spray drift.
  - Do not apply when wind is gusting or wind speed exceeds 15 mph as uneven spray coverage and drift
    may result. Avoid application to border rows adjacent to susceptible crops such as soybeans, field
    peas, or sunflowers under windy conditions unless one of the following drift management steps is
    taken:
    - (1) application is made only when the wind direction is such that the susceptible crop is up-wind from the treatment area (wind blowing from the susceptible crop toward the treated crop); or
    - (2) the applicator leaves an adequate buffer zone between the treated crop and the susceptible crop and coarse or low drift nozzle configurations are used.

A drift control or deposition agent may be used with this product to aid in reducing spray drift due to wind when making applications adjacent to susceptible crops, but may not be effective after prolonged pumping of the spray mix.

On calm days with little or no wind, check for temperature inversions before making herbicide applications. Temperature inversions occur under calm conditions with little or no wind and air temperature increases with increasing height above the ground. Inversion conditions may be indicated by a layer of fog or mist near the ground and, under clear conditions, may be detected by use of a smoke column. A temperature inversion is indicated when smoke does not rise in a column, but layers at some level above the ground. Do not apply herbicides if temperature inversion conditions exist in the treatment area.

#### **Sprayer Cleanup**

To avoid injury to or exposure of non-target crops, thoroughly clean and drain spray equipment used to apply Milestone after use. Cleaning should occur as soon as possible after application of Milestone. Spray equipment should be cleaned after use with Milestone by the following procedure:

- 1. Drain any remaining Milestone from the spray tank and dispose of according to label disposal instructions.
- 2. Hose down the interior surfaces of the tank. Flush tank, hoses, boom, and nozzles with clean water for 10 minutes. Fill the tank with water and recirculate for 15 minutes. Spray part of the mixture through the hoses, boom, and nozzles and drain the tank. All rinse water must be disposed of in compliance with local, state, and federal guidelines.
- 3. Fill the tank with water and recirculate for 15 minutes. For optimum cleaning, a tank cleaner such as liquid ammonia (1 gallon per 100 gallons of water) or other commercial tank cleaner is required in the second rinse if the spray equipment will be used on crops other than field corn. Spray part of the mixture through the hoses, boom, and nozzles and drain the tank. All rinse water must be disposed of in compliance with local, state, and federal guidelines.
- 4. Remove the nozzles and screens and clean separately.
- 5. If the spray equipment will be used on crops other than field corn, repeat steps 1 and 2 again and thoroughly wash the spray mixture from the outside of spray tank and the boom.

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