

62719-519

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



United States
Environmental Protection
Agency

Office of Pesticide Programs

Dr. John Jachetta
Dow AgroSciences, LLC
9330 Zionsville Rd.
Indianapolis, IN 46268-1054

MAR 31 2010

Subject: Amendment to add Supplemental Labeling for Use on Field Corn and
Field Corn Grown for Ensilage
EPA Reg. No.: 62719-519
Milestone®

Dear Dr. Jachetta,

The Agency has received your request to amend your labeling, dated October 13, 2008.
The submitted labeling is acceptable, provided the following revisions are made:

1. Under Directions for Use, add the following statements:
 - 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
2. Clarify the per-application maximum rate (e.g., "Do not apply greater than 0.57 fl oz Milestone/A (0.0089 lb ae/A) in a single application, or corn injury and reduction of yield may result")
3. Stipulate the maximum number of applications per year (3) and the application interval (3 days).
4. Add the statement, "Do not apply by air," to the Precautions and Restrictions section.
5. Based on the Occupational and Residential exposure assessment, the appropriate Restricted Entry Interval (REI) for this and all other aminopyralid products is 48 hours, due to the Toxicity Category I eye irritation study for aminopyralid acid. Revise the REI statement in the Agricultural Use Requirements box on the master Milestone label to reflect this. Additionally, add Protective Eyewear to the required early-entry PPE in the Agricultural Use Requirements box. (Note: These changes must also be made to all other aminopyralid end-use product labels).

6. Add the following Groundwater Advisory statement to the master Milestone label: "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." Note: This change must also be made to all other aminopyralid end-use product labels).

7. An immunotoxicity study in rats and/or mice is now required for aminopyralid, as part of the new 40CFR Part 158 requirements.

8. Submit a revised Section B (reflecting the modifications to spray/spot application timing and PHI) and revised Section F (reflecting the correct commodity definitions, below):

Corn, field, forage.....	0.30 ppm
Corn, field, grain.....	0.20 ppm
Corn, field, stover.....	0.20 ppm

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the accepted label is enclosed for your records. Please submit 1 copy of the final printed label when the product is released for shipment.

If you have any questions, please contact Kathryn Montague (703-305-1243 or montague.kathryn@epa.gov).

Sincerely,

MICHAEL WALSH FOR

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

MAR 31 2010

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

62719-519

Supplemental Labeling



Dow AgroSciences LLC

9330 Zionsville Road

Indianapolis, IN 46268-1054 USA

Milestone[®]
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.

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. An application rate of Milestone in excess of 0.57 fluid oz per acre can injure to corn and reduce yield.

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.

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

[†] **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.

(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.

Do not aerially apply Milestone unless permitted by EPA approved supplemental labeling.

- **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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