

## **WEEDS CONTROLLED AT 12-24 FLUID OUNCE PER ACRE**

### General Information

### Resistance Management Guidelines

- 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.
- 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.

### Rangeland, Permanent Grass Pastures, CRP Acres, Non-Cropland Areas, and Grazed Areas In and Around These Sites

MezaVue herbicide may be applied by aerial or ground equipment to control 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 and grazed areas in and around these sites without injury to most grasses.

\* Hay from grass treated with MezaVue within the preceding 18 months can only be used on the farm or ranch where the product is applied unless allowed by supplemental labeling.

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. Do not apply directly to water and take precautions to minimize spray drift onto water.

### Use Precautions and Restrictions

Consult with a Dow AgroSciences representative if you do not understand the “Use Precautions and Restrictions.” Call 1-800-258-3033 for more information.

### Pasture and Rangeland Restrictions

- Do not use grasses treated with MezaVue in the preceding 18 months for hay intended for export outside the United States.
- Hay from areas treated with MezaVue in the preceding 18 months CAN NOT be distributed or made available for sale off the farm or ranch where harvested unless allowed by supplemental labeling.
- Hay from areas treated with MezaVue in the preceding 18 months CAN NOT be used for silage, haylage, baylage and green chop unless allowed by supplemental labeling.
- Do not move hay made from grass treated with MezaVue within the preceding 18 months off farm unless allowed by supplemental labeling.
- Do not use hay or straw from areas treated with MezaVue within the preceding 18 months or manure from animals feeding on hay treated with MezaVue in compost.
- Do not use grasses treated with MezaVue in the preceding 18 months for seed production.

**Maximum Application Rate:** On all labeled use sites do not broadcast apply more than 32 fl oz per acre of MezaVue per year. The total amount of MezaVue applied broadcast, as a re-treatment, and/or spot treatment cannot exceed 32 fl oz per acre per year. Spot treatments may be applied at an equivalent broadcast rate of up to 1.04 lb acid equivalent (64 fl oz of MezaVue) 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 0.52 lb acid equivalent (32 fl oz) per acre of MezaVue per annual growing season as a result of broadcast, spot, or repeat applications.

- **Avoiding Injury to Non-Target Plants:** Do not aerially apply MezaVue 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.

- MezaVue 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.
- 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 to lawns, turf, ornamental plantings, urban walkways, driveways, tennis courts, golf courses, athletic fields, commercial sod operations, or other high-maintenance, fine turfgrass areas, or similar areas.
- Trees adjacent to or in a treated area can occasionally be affected by root uptake of MezaVue. Do not apply MezaVue 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.

- Applications made during periods of intense rainfall, to soils saturated with water, surfaces paved with materials such as asphalt or concrete, or soils through which rainfall will not readily penetrate may result in runoff and movement of MezaVue. Injury to crops may result if treated soil and/or runoff water containing MezaVue is washed, or moved onto land used to produce crops. Exposure to MezaVue may injure or kill susceptible crops and other plants, such as grapes, soybeans, tobacco, sensitive ornamentals. Do not treat frozen soil where runoff could damage sensitive plants.

### Forage and Tree Tolerance

- Established grasses are tolerant to this product.
- Do not use on bentgrass or limpo grass (*Hemarthria*) unless injury or loss of such plants can be tolerated.
- Do not use on alfalfa or other desirable forbs, especially legumes such as clover, unless injury or loss of such plants can be tolerated. Seeding of some legumes may not be successful if done within one year of application.
- Many woody species are susceptible to this product. Trees can be affected by root uptake of the herbicide from surface soil or by excretion of the herbicide from the roots of nearby treated trees. Do not apply MezaVue within the area occupied by roots of desirable trees, unless such injury can be tolerated.
- When Reseeding Grasses:
  - When MezaVue is applied before reseeding, do not reseed treated areas for a minimum of three weeks after application.
  - When MezaVue is applied following reseeding, to avoid grass injury, do not apply until grass seedlings are well established as indicated by tillering (usually after 4 true leaves have emerged), development of a secondary root system and vigorous growth.
  - Sprigged bermudagrass. Do not apply MezaVue until runners (stolons) have reached at least 6 inches in length. Apply only during favorable growing conditions
  - Seeding Legumes: Do not plant forage legumes until a soil bioassay has been

conducted to determine if aminopyralid and/or picloram concentration remaining in the soil will adversely affect the legume establishment.

## G razing and Haying Restrictions

- Grazing or harvesting green forage:

1) Lactating dairy animals: Do not allow lactating dairy animals to graze treated areas and do not harvest forage for consumption by lactating dairy animals within 14 days after application.

2) Other Livestock: There are no grazing restrictions for non-lactating dairy animals or other livestock including horses, sheep, goats, and other animals in the treatment area.

3) Do not transfer grazing animals from areas treated with MezaVue 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 MezaVue to cause injury to sensitive broadleaf plants.

4) 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.

- Haying (harvesting of dried forage): Do not harvest hay within 7 days after application. Cutting hay too soon after spraying weeds will reduce weed control. Wait 7 days after herbicide application to cut grass hay to allow herbicide to work.

- Slaughter Restrictions: Withdraw livestock from grazing treated grass or consumption of treated hay at least 3 days before slaughter. This restriction is applicable to grazing or hay harvested from treated areas during the same growing season following application.

- Restrictions in Hay or Manure Use:

- Do not use treated plant residues, including hay or straw from areas treated within the preceding 18 months, in compost, mulch, or mushroom spawn.

- Do not use manure from animals that have grazed forage or eaten hay harvested from treated areas within the previous 3 days, in compost, mulch, or mushroom

spawn.

- 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 MezaVue-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 (including soybeans, sunflower, tobacco, vegetables, field beans, peanuts, and potatoes) in fields treated with manure from animals that have grazed forage or eaten hay harvested from MezaVue-treated areas until an adequately sensitive field bioassay is conducted to determine that the MezaVue concentration in the soil is at level that is not injurious to the crop to be planted.
- 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 MezaVue-treated areas until an adequately sensitive field bioassay is conducted to determine that the MezaVue 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 MezaVue 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. Cereals can be planted one year after treatment. Most broadleaf crops are more sensitive and can require at least 2 years depending on the crop and environmental conditions. Do not plant a broadleaf crop until an adequately sensitive field bioassay shows that the level of MezaVue 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 one year after the last application of aminopyralid in that field. 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 MezaVue 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 have been removed by thorough cleaning of equipment.

Equipment used to apply MezaVue 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 MezaVue 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 the 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.

**Aerial Broadcast Application:** Do not apply less than 4 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 a maximum of 32 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 1.04 lb acid equivalent (64 fl oz of MezaVue) 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 1.04 lb acid equivalent (64 fl oz) per acre of MezaVue 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 MezaVue applied must not exceed 64 fl oz per acre per year. To prevent misapplication, spot treatments should be applied with a calibrated sprayer.

To calculate the amount of MezaVue 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 1 000 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 MezaVue 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 Labeled 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. For the control of cactus and associated woody plants, suggested surfactants for ground or aerial broadcast applications, and individual plant treatments include crop oil concentrate, or methylated seed oil, including modified vegetable oil surfactant blends, at the manufacturer's specified rates.

**Tank Mixing with Other Herbicides:** MezaVue at rates of up to 32 fl oz per acre may be mixed with labeled rates of other herbicides registered for application on all labeled use sites. MezaVue 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 MezaVue 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.

### Use Rates and Timing

MezaVue 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 MezaVue, avoid mowing, haying, shredding, burning, or soil disturbance in treated areas for at least 14 days following application.

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

MezaVue 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.

MezaVue 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 MezaVue, 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 MezaVue 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. MezaVue also provides preemergence control of germinating seeds or seedlings of susceptible weeds following application.

#### Limitations, Restrictions, and Exceptions

Malta, purple, and yellow starthistle: Apply MezaVue at 12 to 24 fl oz per acre to plants at the rosette through bolting growth stages.

Bull, musk, and plumeless thistles: Apply MezaVue at 12 to 24 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 18 to 24 fl oz when plants are at the late bolt through early flowering growth stages. 2,4-D should be tank-mixed with MezaVue starting at the late bud stages

#### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

[Spot treatment](#)

#### Rates

[field rates 0](#)

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#### Restricted Entry Interval

48 hours

#### Timings

[Postemergence \(Weed\)](#)