This supplemental label expires on October 30, 2016 and must not be used or distributed after this date.

Active Ingredient:
Mesotrione (CAS No. 104206-82-8) ................................................................. 40.0%
Other Ingredients: ................................................................. 60.0%
Total: 100.0%

Contains 4 lbs. of active ingredient mesotrione per gallon.

KEEP OUT OF REACH OF CHILDREN.

CAUTION

EPA Reg. No. 100-1131

All applicable directions, restrictions and precautions on the EPA-registered label are to be followed.

Before using Callisto Herbicide as permitted according to this supplemental labeling, read and follow all applicable directions, restrictions, and precautions on the EPA registered label on or attached to the pesticide product container. This Supplemental Labeling contains revised use instructions and or restrictions that may be different from those that appear on the container label. This Supplemental Labeling must be in the possession of the user at the time of pesticide application. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
**DIRECTIONS FOR USE**

**ADDITIONAL SPRAY DRIFT PRECAUTIONS FOR AERIAL APPLICATIONS**

The distance of the outer-most nozzles on the boom must not exceed \( \frac{3}{4} \) the length of the wingspan or rotor.

Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they must be observed.

Spray must be released at the lowest height consistent with effective weed control and flight safety.

For best results, each specific aerial application vehicle used should be quantifiably pattern tested for aerial application of Callisto initially and every year thereafter.

**RESTRICTION:** For aerial application use only nozzles producing coarse-ultra coarse droplets. Do not use nozzles producing fine-medium size droplets.

For some use patterns, reducing the effective boom length to less than \( \frac{3}{4} \) of the wingspan or rotor length may further reduce drift without reducing swath width.

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.

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.).

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

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.

Applications should not occur during a 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 smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a connected cloud (under low wind conditions) indicates an inversion, while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing.

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

APPLICATION INFORMATION

Aerial Application

RESTRICTION: Callisto can be applied aerially only to corn and sugarcane.

RESTRICTION: For aerial application use only nozzles producing coarse-ultra coarse droplets. Do not use nozzles producing fine-medium size droplets.

Callisto may be applied aerially for preemergence or postemergence weed control in corn only in the following states: Alabama, Arkansas, Colorado, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, North Dakota, Nebraska, Ohio, Oklahoma, South Dakota, Tennessee, and Texas.

Callisto may be applied aerially for preemergence or postemergence weed control in sugarcane only in the following states: Florida, Louisiana and Texas.

Applications must be made in a minimum of 2 gallons of water per acre.

BLUEGRASS, RYEGRASS (ANNUAL AND PERENNIAL) AND TALL FESCUE GROWN FOR SEED

Callisto can be applied to bluegrass, annual ryegrass, perennial ryegrass, or tall fescue which is grown for seed. Callisto can be applied as a preemergence application to bare soil (new seeding) or as a postemergence application to an emerged grass crop.

Preemergence Application: Apply Callisto as a broadcast, surface spray at a rate of 6.0 fl. oz./A to a newly seeded crop. The Callisto application must be made prior to crop and weed emergence. Rainfall or irrigation as the newly seeded grass crop emerges from the soil may increase the risk of injury from Callisto. Grass crop injury
symptoms include temporary bleaching of newly emerged leaves, or in extreme conditions, stunting. For a list of preemergence weeds controlled or partially controlled see Table 2. In addition to the weeds listed in Table 2, Callisto applied preemergence will control managrass.

**Postemergence Application:** Apply Callisto as a broadcast postemergence spray at a rate of 3.0-6.0 fl. oz./A to emerged bluegrass, perennial ryegrass or tall fescue grown for seed. Use the 3.0 fl. oz./A rate for postemergence control or partial control of the weeds listed in Table 1. In addition to the weeds listed in Table 2, Callisto applied postemergence will control managrass (up to 3 tillers).

Use the 6.0 fl. oz./A rate for postemergence weed control plus extended residual weed control (see Table 2). The addition of a crop oil concentrate type adjuvant at 1% v/v or a nonionic surfactant (NIS) type adjuvant at a rate of 0.25% v/v is recommended. Postemergence applications of Callisto may result in temporary bleaching of the grass crop.

In addition to COC or NIS, a spray grade UAN (e.g. 28-0-0) at the rate of 2.5% v/v or ammonium sulfate (AMS) at the rate of 8.5 lb./100 gallons of spray solution may also be added for improved control of emerged weeds. The addition of UAN or AMS will improve consistency of postemergence weed control but will also increase the risk of grass crop injury, especially at Callisto rates greater than 3.0 fl. oz./A. If grass crop injury is a concern, do not add UAN or AMS to the spray solution.

Tank mixing other pesticides with Callisto postemergence may increase the risk of crop injury. Avoid adding pesticides with emulsifiable concentrate (EC) type formulations to Callisto for applications made postemergence to the crop.

**Restrictions:**

1. Do not harvest the grass crop for seed or straw within 60 days following the application of Callisto.
2. Do not graze or feed forage from treated areas within 14 days following harvest of seed or straw and at least 74 days after application of Callisto.
3. Do not make more than two applications of Callisto per year.
4. Do not apply more than 6 fl. oz./A in a single application and not more than 9 fl. oz./A of Callisto per year.
5. Applications of Callisto to grasses grown for seed species not listed on this label may result in severe injury.
BLUEBERRY, CURRANT (BLACK AND RED), LINGONBERRY, RASPBERRY (BLACK AND RED), AND BLACKBERRY

Callisto may be applied as a pre-bloom post-directed spray in high bush blueberry, lingonberry, red currant, black currant, black raspberry, red raspberry, and blackberry. For a list of weeds controlled see Tables 1 and 2. Callisto may be applied in bush or caneberries at a rate up to 6 fl. oz./A. If a split application weed control program is desired, 3 fl. oz./A followed by 3 fl. oz./A may be used, but no more than two applications per crop per year are allowed and not more than 6 fl. oz./A in total per year. If two applications are made, they must be made no closer than 14 days apart. The use of a crop oil concentrate (COC) type adjuvant at the rate of 1% v/v is recommended, but avoid using COC adjuvants that are injurious to bush or caneberry leaves. Do not apply Callisto to bush or caneberry after the onset of the bloom stage or illegal residues may occur.

In low bush blueberries, Callisto may only be applied in the non-bearing year. This application may be a broadcast application. Up to 6 fl. oz./A of Callisto may be applied in a single application, or 3 fl. oz./A followed by 3 fl. oz./A if used in a split application program. No more than two applications per year are allowed and not more than 6 fl. oz./A in total per year. If two applications are made, they must be made no closer than 14 days apart. The use of a crop oil concentrate (COC) type adjuvant at 1% v/v is recommended. Applications of Callisto during dry weather conditions and/or temperatures above 85° can cause injury to Lowbush blueberries. Applications of Callisto can cause yellowing or necrosis of leaves and under severe conditions, leaf drop may occur especially on “Sourtop” variety blueberries.

CRANBERRY

Callisto may be applied to bearing or non-bearing cranberry beds for control or suppression of bog St. John’s wort (*Hypericum boreala*), rushes (*Juncus canadensis*, *J. effuses*, *J. bufonius*, *J. tenuis*), sedges spp. (*Carex* spp.), yellow loosestrife (*Lysimachia terrestris*) and silverleaf (*Potentilla pacifica*) in addition to the weeds listed in Tables 1 and 2. Callisto may be applied in cranberries at a rate up to 8 fl. oz./A. Apply no more than two applications per crop per year and not more than 16 fl. oz./A in total per year. If two applications are made, they must be made no closer than 14 days apart. The use of a crop oil concentrate (COC) type adjuvant at 1% v/v or non-ionic surfactant (NIS) at 0.25% v/v is recommended. Avoid using COC adjuvants that are injurious to cranberry leaves. In non-bearing cranberries, make the Callisto application(s) after the bud break stage, but not less than 45 days before flooding in fall or winter. In bearing cranberries, make the Callisto application(s) after the bud break stage, but not less than 45 days prior to flooding or harvest.

Callisto may be applied through irrigation systems (chemigation) including center pivot or solid set.
Chemigation – Sprinkler Irrigation Application for Cranberry Only

Check the irrigation system to ensure uniform application of water to all areas. Thorough coverage of foliage is required for good control. Good agitation in the pesticide supply tank should be maintained prior to and during the entire application period. Apply by injecting the recommended rate of Callisto herbicide into the irrigation system using a metering device that will introduce a constant flow and by distributing the product to the target areas in 0.1-0.2 acre-inch of water. In general, use the least amount of water in this range required for proper distribution and coverage.

Once the application is completed, flush the entire irrigation and injection system with clean water before stopping the system. In addition to the above recommendations, if application is being made during a normal irrigation set of a stationary sprinkler, the recommended rate of Callisto herbicide for the area covered should be injected into the system only during the end of the irrigation set for sufficient time to provide adequate coverage and product distribution.

Chemigation Use Precautions – Sprinkler Irrigation Application

1. Apply this product only through sprinkler irrigation systems including center pivot or solid set. Do not apply this product through any other type of irrigation system.

2. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

3. If you have any questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

4. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

5. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person shall shut the system down and make necessary adjustments should the need arise.

6. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back-flow.

7. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
8. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when pressure decreases to the point where pesticide distribution is adversely affected.

11. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and are capable of being fitted with a system interlock.

12. Any alternatives to the above required safety devices must conform to the list of EPA approved alternative devices.

13. Do not apply when wind speed favors drift beyond the area intended for treatment or nonuniform distribution of treated water.

Additional Restrictions: 1) Do not apply directly to water or areas where surface water is present outside the bog system. 2) Do not contaminate water when disposing of equipment wash water or rinsate. 3) Do not apply within 10 feet of surface water outside the bog system. 4) Do not spray to runoff.

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