

## **POTATOES - PREEMERGENCE - COURSE SOIL - OVER 3 % ORGANIC MATTER - ANNUAL GRASSES**

### General Information

### PRODUCT INFORMATION

Observe all precautions and limitations on the labels of each product used in tank mixtures. Tank mixture partners must be registered in states where they are used. Refer to and follow the label for each tank mix product used.

Do not apply under conditions which favor runoff or wind erosion of soil containing this product to non-target areas.

To prevent off-site movement due to runoff or wind erosion:

- Avoid treating powdery dry or light sand 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.
- Do not use tailwater from the first flood or furrow irrigation of treated fields to treat non-target crops, unless at least ½ inch of rainfall has occurred between application and the first irrigation.

Ground Spray Equipment: Apply Ledger alone or in tank mixtures by ground equipment in a minimum of 10 gal. of spray mixture per acre, unless otherwise specified.

Use sprayers that provide accurate and uniform application. Calibrate the sprayer before use at the beginning of the season. For Ledger tank mixtures with wettable powder or dry flowable formulations, screens and strainers should be no finer than 50-mesh.

### Center Pivot Irrigation Application

If chemigating, apply this product only through a center pivot irrigation system. Do

not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have questions about calibration, you should contact State Extension specialists, equipment manufacturers, or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system, unless the pesticide label-prescribed safety devices for public water systems are in place. 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.

Precaution for center pivot applications: Where sprinkler distribution patterns do not overlap sufficiently, unacceptable weed control may result. Where sprinkler distribution patterns overlap excessively, crop injury may result.

Aerial Application: Apply Ledger in water using a minimum spray volume of 2 gal./A. Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Make applications at a maximum height of 10 ft. above the crop with low-drift nozzles at a maximum pressure of 40 psi. Avoid application to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

Impregnation onto Dry Bulk Granular Fertilizers Many dry bulk granular fertilizers may be impregnated or coated with Ledger and used to control weeds. When applying Ledger with dry bulk fertilizers, follow all directions for use and precautions on the Ledger label regarding target crops, rates per acre, soil texture, application methods, and rotational crops.

Complying with all individual state regulations relating to dry bulk granular fertilizer blending, registration, labeling, and application is the responsibility of the individual and/or company selling the herbicide/fertilizer mixture.

Prepare the herbicide/fertilizer mixture by using any closed drum, belt, ribbon, or other commonly used dry bulk fertilizer blender. Nozzles used to spray Ledger onto the fertilizer must be spaced to provide uniform spray coverage. Care should be taken to aim the spray onto the fertilizer only, avoiding the walls of the blender.

If the herbicide/fertilizer mixture is too wet, add a highly absorptive material, such as Agsorb FG or Celatom MP-79, or similar granular clay or diatomaceous earth

materials, to obtain a dry, free-flowing mixture. Absorptive materials should be added only after the herbicide has been thoroughly blended into the fertilizer mixture. Best application results will be obtained by using a granule of 6/30 particle size or of a size similar to that of the fertilizer materials being used. Generally, less than 2% by weight of absorptive material will be needed. Avoid using more than 5% absorptive material by weight.

#### Pneumatic (Compressed Air) Application

High humidity, high urea concentrations, low fertilizer use rates, and dusty fertilizer may cause fertilizer mixtures to build up or plug the distributor head, air tubes, or nozzle deflector plates. To minimize buildup, premix Ledger with Exxon Aromatic 200 at a rate of 2.0-2.5 pt./gal. of Ledger. Aromatic 200 is a noncombustible/nonflammable petroleum product. Aromatic 200 may be used in either a fertilizer blender or through direct injection systems. Drying agents should not be used when using Aromatic 200.

Restrictions: (1) Mixtures of Ledger and Aromatic 200 must be used on dry fertilizer only. Poor results or crop injury may result if these mixtures are used in water or liquid fertilizer solutions for spraying applications. (2) When impregnating Ledger in a blender before application, a drier mixture can be obtained by substituting a drying agent for Aromatic 200. The use of Agsorb FG or another drying agent of 6/30 particle size is recommended. (3) Drying agents are not recommended for use with On-The-Go impregnation equipment.

Precautions: To avoid potential for explosion, (1) Do not impregnate Ledger on ammonium nitrate, potassium nitrate, or sodium nitrate, either alone or in blends with other fertilizers. (2) Do not combine Ledger with a single superphosphate (1-20-0) or treble superphosphate (0-46-0). (3) Do not use Ledger on straight limestone, since absorption will not be achieved. Fertilizer blends containing limestone can be impregnated.

#### Application of Impregnated Dry Bulk Granular Fertilizer

Apply 200-700 lb. of the herbicide/fertilizer mixture per acre. For best results, apply the mixture uniformly to the soil with properly calibrated equipment immediately after blending. Uniform application of the herbicide/fertilizer mixture is essential in order to prevent possible crop injury to subsequent rotational crops. Non-uniform application may also result in unsatisfactory weed control. In areas where

conventional tillage is practiced, a shallow incorporation of the mixture into the soil is recommended to obtain satisfactory weed control. On fine- or medium-textured soils in areas where soil incorporation is not planned, i.e., reduced-tillage situations or in some conventional till situations, make applications approximately 30 days before planting to allow moisture to move the herbicide/fertilizer mixture into the soil. On coarse-textured soils, make applications approximately 14 days prior to planting.

Precautions: To help avoid rotational crop injury, make applications as early as possible, since Ledger impregnated onto dry bulk fertilizers can be expected to last longer in the soil than Ledger applied as a spray in water or fluid fertilizer.

### Replanting

If replanting is necessary in fields previously treated with Ledger, the field may be replanted to soybeans or potatoes. Before replanting, refer to the specific crop use sections for recommendations, precautions and restrictions.

### Limitations, Restrictions, and Exceptions

#### POTATOES (EXCEPT CALIFORNIA) - PREEMERGENCE

Ledger is recommended for preemergence weed control prior to or after potato emergence. Ledger has some postemergence activity on weeds, but the consistency and spectrum of weed control is much better preemergence to weeds. Preplant incorporated applications are not recommended due to an increased risk of crop injury.

#### Preemergence Applications

Apply with ground spray equipment, aerial spray equipment, or by center pivot irrigation equipment which is capable of making a uniform broadcast application. Apply after planting but before crop emergence, or apply after drag-off if this operation is part of the usual cultural practice.

Ledger will provide suppression of the following broadleaf weeds (except triazine-resistant broadleaf biotypes): cocklebur, common ragweed, kochia, velvetleaf, hairy nightshade and common sunflower and grasses such as seedling johnsongrass, Texas panicum, sandbur spp., shattercane, and the volunteer crops: barley, sorghum, and wheat.

Except triazine-resistant biotypes other than Galinsoga spp., black nightshade, pigweed spp. and waterhemp spp.

Suppression means significant activity, but not always at a level considered acceptable for commercial weed control.

### Application Rates

Where a rate range is given, use the lower end of the rate range on the more coarse-textured soils listed within that group and/or where weed pressures are known to be light; use the high end of the rate range on the more fine-textured soils listed within that group and/or where the weeds pressures are known to be heavy.

COARSE - On soils that classify as a "sand" texture do not use more than 1.5 pt./A of Ledger, or more than 0.5 lb. a.i./A of metribuzin in total, or

crop injury may occur.

### Restrictions:

- For potatoes grown in soils with organic matter between 3% and 10% do not apply more than 5.1 pints (3.35 lb. a.i. S-metolachlor) per acre/year. Do not apply more than 1.0 lb. a.i. of metribuzin per acre/year. Ledger is not recommended for application to muck or peat soils.
- Do not apply after June 30 in Idaho, Oregon, or Washington if the treated land will be planted to a crop other than potatoes in the fall.
- Do not apply Ledger to sweet potatoes or yams.

### Precautions:

- Preemergence applications on these varieties may cause crop injury under adverse weather conditions, on coarse soils, under high soil pH and with higher use

rates.

- Potato varieties may vary in their response to a given herbicide application. When using Ledger for the first time on a particular variety, always determine crop tolerance before using on a fieldscale.
- The planting of sensitive crops such as lettuce, cole crops and cucurbits during the next growing season following application of Ledger may result in injury to that crop.
- Certain cereal varieties are sensitive to metribuzin (e.g. see cereal section of the Sencor 4 or Sencor DF label) and should not be planted during the next growing season unless the following cultural practices occur:
  - a. Potato vines left in the row as a result of harvest must be uniformly distributed over the soil surface prior to plowing, and
  - b. Plow with a moldboard plow to a depth sufficient to mix the upper 8 inches of soil.
- Do not apply Ledger as a preplant incorporated application in potatoes, or crop injury may occur.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Pre-Harvest Interval

60 days

Rates

[field rates 0](#)

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Restricted Entry Interval

12 hours

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Soils

[Coarse](#)

[Loamy Sand](#)

[Sandy Loam](#)

[Sand](#)

Timings

[Preemergence \(Weed\)](#)