

# **GARLIC - CUTWORMS, LEAFMINERS, ETC.**

## General Information

### DIRECTIONS FOR USE

Resistance: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product or other products with a similar mode of action may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local agricultural advisor for the best alternative method of control for your area.

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.

Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application.

### CHEMIGATION

Apply this product only through the following types of sprinkler irrigation: center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. For questions concerning calibration,

consult the equipment manufacturer or your local State Extension Service representative. A person knowledgeable of the chemigation system and responsible for its operation, or person under the supervision of the person responsible, shall shut the system down and make necessary adjustments should the need arise.

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 backflow.

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.

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

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

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 capable of being fitted with a system interlock.

PERMETHRIN 3.2 AG should be applied continuously for the duration of the water application. PERMETHRIN 3.2 AG should be diluted in sufficient volume to ensure accurate application of the area to be treated. When using chemigation, a minimum of 0.1 inch per acre of irrigation water is recommended. Agitation generally is not required when a suitable diluent is used. A diluent test should be conducted to ensure that phase separation will not occur during dilution and application. Failure to achieve a uniform dilution throughout the time of application may result in undesirable residues or less than desirable control.

#### COMMERCIAL IMPREGNATION AND APPLICATION ON DRY BULK FERTILIZERS

PERMETHRIN 3.2 AG may be impregnated on dry bulk fertilizers. When applied as

directed, PERMETHRIN 3.2 AG /dry bulk fertilizer mixtures provide insect control equal to that provided by the same rates of PERMETHRIN 3.2 AG applied in water.

The PERMETHRIN 3.2 AG/fertilizer mixtures may be surface applied or shallow incorporated. The higher rate should be used if incorporation is used.

Impregnation: Apply using a minimum of 200 pounds of dry bulk fertilizer per acre and up to a maximum of 450 pounds per acre with the recommended amount of PERMETHRIN 3.2 AG per acre. Use a closed rotary-drum mixer or a similar type of closed blender equipped with suitable spray equipment. The spray nozzle(s) should be in a position to provide a uniform, fine spray pattern over the tumbling fertilizer for thorough coverage. The physical properties of fertilizers vary particularly in liquid absorption capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with PERMETHRIN 3.2 AG provides a satisfactory dry mixture. If the absorptive capacity is inadequate, the use of a highly absorptive powder is required to provide a dry flowable mixture. Microcel E (Johnson Manville Product Corporation) is a recommended absorbent powder. Generally less than 2% by weight of Microcel E is required. DO NOT impregnate PERMETHRIN 3.2 AG onto straight coated ammonium nitrate or straight limestone because these materials will not absorb the insecticide. Dry fertilizer blends containing mixtures of ammonium nitrate or limestone may be impregnated with PERMETHRIN 3.2 AG.

The amount of PERMETHRIN 3.2 AG actually required in the preparation of individual fertilizer mixtures should be determined carefully for each production operation. This is necessary to ensure that the amount of pesticide actually contained in the mixture applied to the soil represents the correct rate of use. Bulk fertilizer impregnated with PERMETHRIN 3.2 AG should be applied immediately, not stored. All individual state regulations relating to bulk dry fertilizer blending, registration, labeling, and application of the mixtures, are the responsibility of the individual and/or company selling the fertilizer and PERMETHRIN 3.2 AG mixture.

## PRODUCT INFORMATION

Important:

PERMETHRIN 3.2 AG is toxic to fish. Exercise care when making applications near ponds, lakes, streams, reservoirs, and other aquatic environments where fish are present.

For advice concerning current control practices with relation to specific local conditions, consult your local State Cooperative Extension or regulatory agencies.

PERMETHRIN 3.2 AG is formulated as an emulsifiable concentrate (EC) formulation and is to be diluted and applied as an emulsion. When tank mixing as an emulsion with other products, observe all precautions and limitations on the labels of each product in the mixture.

PERMETHRIN 3.2 AG can be tank mixed with natural pyrethrin-containing products or Insect Growth Regulators (IGRs). Do not tank mix with dichlorvos (DDVP) or other fumigant products.

## APPLICATION INSTRUCTIONS

Unless otherwise directed by state-specific 24c labeling, follow the directions for use in each crop group section.

PERMETHRIN 3.2 AG is a 3.2 pounds per gallon formulation of the insecticide permethrin. Apply PERMETHRIN 3.2 AG when insects appear or feeding is noticed. The higher rate should be used as pest populations increase. Repeat the application as necessary to maintain control. Use sufficient water to obtain full coverage. With the exception of crops listed below, do not plant rotational crops within 60 days of last application.

This label must be in the possession of the user at the time of application.

Refer to label for RATE CONVERSION CHART

Limitations, Restrictions, and Exceptions

## SPECIFIC APPLICATION INSTRUCTIONS

Apply by air or ground equipment. By air, apply in a minimum of 5 gallons of water per acre. By ground, apply in a minimum of 20 gallons of water per acre. Use sufficient water to obtain full coverage of foliage.

Begin applications when pests appear and repeat as necessary to maintain control. Use the higher label rates as onion thrips population increases and avoid rescue situations.

## RESTRICTIONS

- Do not apply more than 32 oz. product (0.8 lbs. a.i.) active ingredient per acre per season.
- Do not apply at intervals less than 10 days.
- Do not apply within 1 day of harvest.

### Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

### Pre-Harvest Interval

1 day

### Rates

[field\\_rates 0](#)

[field\\_rates 1](#)

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### Restricted Entry Interval

12 hours

### Timings

[When pests first appear.](#)