

Verimark® Insect Control

Powered by Cyazypyr® active



TOBACCO

Best Management Practices.

For use of Verimark® insect control via tray drench in tobacco.

Help your tobacco realize its potential. Verimark® insect control powered by Cyazypyr® active is a groundbreaking product that provides you with early-season protection from insect pests for visibly vigorous plants from start to finish. Verimark insect control helps growers produce a stronger crop in the field for a more appealing crop at harvest.

Protect your crop's potential for a better harvest

Verimark insect control offers a new mode of action against a cross spectrum of sucking and chewing pests for a healthier and more resilient crop. Applications early in the crop cycle can help protect tender seedlings from feeding damage and transmission of some pest-vectored diseases, including tomato spotted wilt virus when used as a part of a virus-management program.

Quick Facts:

- Long-lasting protection against feeding damage and pest-vectored diseases like tomato spotted wilt virus when used with imidacloprid in tray drench.
- Rapid feeding cessation in the critical crop-establishment phase.
- Cross-spectrum control of sucking and chewing insects, including thrips, tobacco budworm, tobacco hornworm, tomato hornworm and flea beetles.
- Powered by Cyazypyr active for systemic protection of old and new growth.



Transplant tray drench application of Verimark insect control using traveling spray boom.



Calculating Verimark® insect control dose and water volume

To determine the appropriate dose of Verimark® insect control powered by Cyazapyr® active, and the amount of water needed for a tray drench application in tobacco, use the worksheet below and then follow these directions.

- Mix the amount of Verimark insect control in the volume of water needed to drench the desired number of trays and follow application instructions.
- Adjust the tank mix to pH 4-6, if needed.
- Verimark insect control should be mixed and then applied to avoid extended period of time that the product can be with water in solution to avoid hydrolysis.
- Make sure to employ continuous agitation when using a nurse tank.
- Verimark insect control can be dosed into an overhead irrigation boom using a Dosatron. Proper calibration to deliver the target amount per transplant is critical.



Dosatron injecting treatment solution into an irrigation boom.

Calculating Verimark insect control dose and water volume worksheet

To determine the appropriate dose of Verimark insect control and the amount of water needed for a tray drench application in tobacco, complete items A through E, and then use the values in calculations F through I.

(A) Desired rate of Verimark insect control (fluid ounces per acre): _____

(B) Number of plants per acre to be planted: _____

(C) Number of plants in each tray: _____

(D) Total number of trays to be treated: _____

(E) Amount of water needed per tray*: _____

(F) Fluid ounces of Verimark insect control per transplant = $\frac{\text{Desired rate}}{\text{Number of plants per acre}} = \frac{(A)}{(B)} = \frac{(F)}{(F)}$

(G) Fluid ounces of Verimark insect control per tray = Fluid ounces of Verimark insect control per transplant x number of plants in each tray = (F) _____ x (C) _____ = _____ (G)

(H) Total fluid ounces of Verimark insect control = Fluid ounces of Verimark insect control per tray x number of trays = (G) _____ x (D) _____ = _____ (H)

(I) Total volume of water = Number of trays x amount of water needed per tray = (D) _____ x (E) _____ = _____ (I)

(J) Mix and apply the target rate of Verimark insect control (H) in the total volume of water needed for the application (I).

* Determine the amount of water needed to thoroughly drench a transplant tray without runoff at the bottom of the tray. See "Directions for application" on next page. The amount of water needed may vary depending on the size of the transplant and soil plug. Multiply the amount of water needed per tray times number of trays to be treated.

Application

- Use only on transplants grown in soil/potting media.
- Make application within three days of transplanting in the field.
- If possible, discontinue watering 24 hours or less if weather dictates that frequent irrigation is needed before treatment so spray solution is absorbed quickly into the soil.
- Make sure application equipment is clean and free of previous pesticide, fertilizer or deposits of any other material.
- Make sure all nozzles are spraying, and use a flow meter to monitor flow throughout the application.
- Apply as a broadcast, low-pressure, coarse, high-volume spray (flat fan nozzles may provide better droplet and spray distribution) so the solution runs off from the foliage to the soil in the tray, but it does not run off from the bottom of the tray. Flat fan nozzles may provide better droplet and spray distribution.
- If necessary, e.g., when dense seedling foliage is present or spray residues are visible on leaves, make a second pass with water only before the spray solution dries to wash solution from foliage and into the soil. It is critical to drive as much of the spray solution as possible into the soil to maximize product performance.
- Allow tray to dry before transporting to the field for planting, and do not handle prior to four hours after the application without appropriate personal protection equipment.
- Do not mix any other product when applying Verimark® insect control except acidifying agents, if needed, using this method, unless compatibility and crop safety has been shown with the tank mix.
- In the event of irrigation water having alkaline properties or a high pH, the addition of acidifying buffers should be encouraged.
- Verimark insect control has been tested on representative varieties of tobacco. Not all varieties have been tested for crop tolerance to Verimark insect control with this application method. Before treating all plants, test a small number of plants to confirm the crop safety of Verimark insect control applied as a tray drench.

Setting plants in the field

- Once trays are dry, continue watering transplants as needed until planted in the field to minimize water stress and to make sure the active ingredient translocates from the roots to the leaves. Verimark insect control will remain in the treated soil plug even after multiple irrigations.
- Consider timing of thrips flights when applying Verimark insect control to transplants. Protection generally lasts 4 weeks when soil moisture is maintained.
- Dosage should be 2.25 oz./1,000 transplant cells.
- Include Admire® Pro insecticide in your treatment program at 1 oz./1,000 transplant cells.
- When transplanting in the field, handle transplants carefully to avoid treated soil loss from the plug.
- Verimark insect control works best when adequate moisture is maintained in the transplant plug area so roots can continue to translocate the product to the foliage.
- Verimark insect control will control a wide spectrum of chewing and sucking pests and helps manage thrip-vectored diseases, e.g., tomato spotted wilt virus through reduced feeding, population control and delaying onset and secondary spread of the virus. For best results when managing insect-vectored diseases, foliar applications of thrips adulticides may be needed soon after transplanting. If heavy thrip pressure is expected and to monitor thrip flights, it is recommended to apply a foliar thrip product as well.
- Labeled rates for this application method work well for the most common planting densities.
- A tray-drench application of Verimark insect control provides long-lasting control of three to five weeks of labeled pests. The higher rate (13.5 fl. oz./A) provides better protection from insect-vectored diseases and longer residual control, providing a better opportunity for improved yields and quality.
- Thrips have numerous winter annual weedy hosts. Removal of weedy hosts near tobacco fields before transplanting can help improve thrips control and virus reduction.

Managing Resistance

- Only one soil application, i.e., transplant water treatment, hill drench, float house or transplant tray drench can be made.
- An application of Coragen® insect control in the transplant water can be made after a tray drench application of Verimark insect control. Use an insect control product with a different mode of action (not group 28) during the first 6 to 8 weeks after making a Verimark insect control and/or Coragen insect control soil application(s).



Tobacco transplants after tray drench application of Verimark insect control in floathouse and Coragen insect control transplant water application.

Contact your local FMC retailer or representative to learn how you can produce a more appealing crop at harvest with Verimark insect control from FMC. Visit FMCAGUS.com/Verimark for more information.

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