TOBACCO (FLUE CURED)- PREVENTATIVE TREATMENT

General Information

TERRAMASTER 4EC is useful as a soil fungicide for control of damping-off, root and stem diseases caused by Pythium and Phytophthora. Use only at recommended rates as overdosage may be harmful to sensitive plants.

TANK MIXTURE COMPATIBILITY
Combinations of TERRAMASTER 4EC with fungicides, insecticides, plant growth regulators or fertilizers may be checked for compatibility before tank mixing. Use a jar test to mix the specified proportions of each product in a volume of water which is proportionate to the expected field use rate. The mix is considered compatible if it remains stable or may be easily reconstituted by shaking after standing for 5 minutes.

USE DIRECTIONS FOR CHEMIGATION:
In addition to the above use rates and recommendations, the following precautions must be observed when using this product in any type of irrigation system:

Apply this product only through the following systems:
1) Pressurized drench (flood) of drip (trickle) systems, 2) Micro-irrigation such as spaghetti-tube or individual tube irrigation, 3) Hand-held calibrated irrigation equipment such as the hand-held wand with injector, 4) Ebb and flow systems.

Do not apply this product through any other type of irrigation system.

The TERRAMASTER 4EC mixture may be continually agitated to assure uniform application of the fungicide material. To improve penetration of the fungicide, the drenching must be followed with an additional quantity of water equal to at least half the volume of the fungicidal drench, applied either by sprinkling or irrigation.

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

If you have any questions about calibration, you may contact State Extension Service 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.

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 contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

POSTING OF TREATED AREAS
Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as
golf courses or retail greenhouses.

Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive area. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.

SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS
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 of the year.

Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water systems may be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

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, or in cases where there is no water pump, when the water pressure decreases to the point where the 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.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Limitations, Restrictions, and Exceptions

TOBACCO
FOR PYTHIUM ROOT ROT CONTROL IN TOBACCO TRANSPLANT FLOAT-BED SYSTEMS (GREENHOUSE OR OUTDOOR FLOAT-BED SYSTEMS)

No more than 3.8 fl. oz. per 100 gallons of water of TERRAMASTER 4EC may be applied to each crop of transplants (from seeding to transplanting in the field) regardless of how many times plants are moved to different float-beds. Care should be taken when moving plants to new locations to avoid treating a second time at an interval of less than two weeks as phytotoxicity could occur.

Preventative Treatment
For flue-cured and other tobacco types, mix 1.4 fl. oz. of TERRAMASTER 4EC per 100 gallons of float-bed water. A sequential preventative application of 1.4 fl. oz. per 100 gallons of water may be made 3 weeks after the first treatment. An additional 1.0 fl. oz per 100 gallons of water may be made 3 weeks after the second treatment for extended control when wet conditions prevent plant setting. Do not apply TERRAMASTER 4EC later than 8 weeks after seeding.

It is essential that TERRAMASTER 4EC be evenly distributed throughout the float-bed water. The TERRAMASTER 4EC needed to treat a float-bed or given area may first be mixed with water in a container, such as 5-gallon buckets or larger containers to form a dilute emulsion. This dilute emulsion may then be added uniformly at several locations to the pool (bay) of float water and thoroughly mixed.
into the water to achieve uniform TERRAMASTER 4EC rates throughout the whole float-bed.

Only apply this product to pools (bays) of water being used in the tobacco float-bed system. Do not apply this product through any other type of irrigation system or to tobacco transplants produced in any other manner including traditional ground plant beds. Application through overhead irrigation or drenching may result in crop injury.

TERRAMASTER 4EC aids in the control of algae at higher rates in float-beds. Presence of algae interferes with greenhouse operations and competes for oxygen and nutrients with transplants. In addition, presence of algae promotes the incidence of shoreflies which may carry inoculum of Pythium and spread disease.

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

If you have questions about calibration, you may contact County Agricultural Extension Agents, equipment manufacturers or other knowledgeable experts.

Injury expressed as temporary stunting and leaf bleaching has been observed in tobacco transplants with the use of TERRAMASTER 4EC in float-beds. Because of the potential for phytotoxicity, the user must assume responsibility for any plant injury, including stunting and loss of transplants, that may occur as a result of this use of TERRAMASTER 4EC.

PPE Requirements: For use in tobacco float-beds, application is continuous from the time this product is diluted and trays or plant materials are immersed in the float-beds through the time the trays or plant materials are removed from the float-beds and replanted. During the entire application period, any person who contacts the float-bed, the diluted pesticide solution, treated trays, or treated plant materials is defined as a handler under the Worker Protection Standard and must be trained as a handler and wear the PPE required for handlers.

The 12-hour REI begins once the float-bed water is treated in the greenhouse or outdoor floatbed systems.

Disposal of Treated Float Water: At the conclusion of transplant production, allow the TERRAMASTER 4EC to dissipate from the water through a 3-day evaporation
period. During that time all trays will be removed from the pool (bay) of water, ventilation will be maximized by uncovering outdoor float-beds when not raining and opening all greenhouse ventilators. Afterwards, use the remaining water for transplanting tobacco into the field or permit treated float-bed water to evaporate.

Float Bed Liner Disposal: Puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Note: Keep people, pets and wildlife away from treated float-beds after tobacco transplants have been removed, or, until water and plastic liners have been disposed of.

Method
N.A.

Rates
field_rates 0

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.

Timings
N.A.