STATE OF HAWAII
Department of Agriculture
ACCEPTED
LICENSE NO.
8026.70

MANZATE® PRO-STICK™ FUNGICIDE

RECEIVED
JUL 29 2013
Pesticides Branch

DISPERSIBLE GRANULES

ACTIVE INGREDIENTS	BY WEIGHT
Mancozeb: A coordination product of zinc ion and manganese ethylenebisdithiocarbamate	75.0%
in which the ingredients are:	
Manganese++	15.0%
Zinc++	1.9%
Ethylenebisdithiocarbamate ion ($C_4H_6N_2S_4$) – –	58.1%
OTHER INGREDIENTS	25.0%
TOTAL	100.0%

Contains 0.75 Pound of Mancozeb Per Pound of Product

EPA Reg. No. 70506-234 **EPA Est. No. 70815-GA-001**

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
IF SWALLOWED:	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED:	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
IF IN EYES:	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. **Contact the Rocky Mountain Poison Center at 1-866-673-6671 for emergency medical treatment information.**	

FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC at 1-800-424-9300.

FUNGICIDE

NET WEIGHT: 6 POUNDS

UPI

Manufactured by: United Phosphorus, Inc. • 630 Freedom Business Center, Suite 402 • King of Prussia, PA 19406 U.S.A. • 1-800-438-6071

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION. MAY IRRITATE EYES, NOSE, THROAT AND SKIN. MAY BE HARMFUL IF ABSORBED THROUGH SKIN, INHALED OR SWALLOWED. Avoid breathing dust or spray mist. Avoid contact with skin, eyes and clothing. Keep away from fire or sparks.

Personal Protective Equipment (PPE)

Some materials that are chemical resistant to this product are nitrile rubber, natural rubber, or butyl rubber. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical resistant gloves, made of any waterproof material (except pilots, groundboom applicators, and airblast applicators)

See engineering controls for additional requirements.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Control Statements:

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for [40 CFR part 170.240 (d)(4-6)].

Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This product is toxic to aquatic organisms. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Cover or incorporate spilled treated seed. Do not contaminate water by disposing of equipment washwater or rinsate. Cover or incorporate spilled treated seed.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

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.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Shoes plus socks
- Chemical resistant gloves made of any waterproof material

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Commercial seed treatments and applications to lawn grasses, golf courses, industrial (office park), and municipal lawns are not within the scope of the Worker Protection Standard.

Do not enter or allow others to enter treated areas until sprays have dried.

MANZATE® PRO-STICK™, a dispersible granule containing mancozeb, is labeled for use as a spray for the control of many important plant diseases.

Application Instructions

AS A SPRAY (Ground or Aerial Equipment) - Apply MANZATE PRO-STICK at the rate shown; use sufficient water to provide thorough coverage: use 20 to 100 gallons per acre for ground equipment and no less than 2 gallons per acre for aircraft. Add MANZATE PRO-STICK slowly to water in the spray tank with agitation, or premix thoroughly in separate holding tank for concentrate or aircraft sprayers. Continuous agitation is required to keep the product in suspension. A spreader-sticker spray adjuvant may be used with this product if needed; contact your local product distributor or United Phosphorus, Inc. representative for specific recommendations. If tank mixed, follow more restrictive labeling of any tank mix partner. Do not tank mix with any product that contains a prohibition on tank mixing.

Restrictions

Foliar Applications

Where EBDC Products Used Allow the Same Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient (maneb, mancozeb or metiram) is used on a crop during the same growing season and the EBDC products used allow the same maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed any one of the specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

Where EBDC Products Used Allow Different Maximum Poundage of Active Ingredient Per Acre Per Season

If more than one product containing an EBDC active ingredient is used on a crop during the same growing season and the EBDC products used allow different maximum poundage of active ingredient per acre per season, then the total poundage of all such EBDC products used must not exceed the lowest specified individual EBDC product maximum seasonal poundage of active ingredient allowed per acre.

Seed Treatment

In addition to the maximum number of foliar applications permitted by the formula stated above, a single application for seed treatment may be made on crops which have registered seed treatment uses.

Chemigation

Apply MANZATE PRO-STICK fungicide only through sprinkler systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set or hand move irrigation systems. Do not apply MANZATE PRO-STICK 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 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.

Specific Instructions for Public Water Systems:

1. 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.
2. 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 system should 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must 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.
5. 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 pesticide distribution is adversely affected.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.

Specific Instructions for Sprinkler Irrigation Systems:

1. 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.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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.
6. 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.
7. Do not apply when wind speed favors drift beyond the area intended for treatment.
8. Good agitation is required in the injection tank.
9. In moving systems, apply specified dosage of MANZATE PRO-STICK as a continuous injection. In non-moving systems inject MANZATE PRO-STICK for 15 to 30 minutes at end of cycle. Use the least amount of water possible consistent with uniform coverage.
10. Mix the amount of MANZATE PRO-STICK needed for acreage to be treated into the quantity of water determined during prior calibration. For moving systems inject into the system continuously for one complete revolution of the field. For non-moving systems inject into system for the time established during calibration.
11. Stop injection equipment after treatment is completed and continue to operate irrigation equipment until all MANZATE PRO-STICK is flushed from system.

Spray Drift Management

A variety of factors including weather conditions (e.g. wind direction, wind speed, temperature, relative humidity) and method of application (e.g. ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Wind Speed

Do not apply at wind speeds greater than 15 mph.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of mancozeb. Where states have more stringent regulations, they must be observed.

Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications:

1. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
2. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.
3. When applications are made with a crosswind, the swath must be displaced downwind. The applicator must compensate for this displacement at the up and downwind edge of the application area by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application:

1. Do not apply with a nozzle height greater than 4 feet above the crop canopy.

Crop	Diseases Controlled	Rate of MANZATE PRO-STICK Per Application	Timing/Intervals (Also refer to Directions for Use)	Restrictions/Comments
Almond	Anthracnose, Blossom Blight *(Monilinia* spp.*)*, Shothole *(Stigmina* spp.*)*, Rust, Scab	6.4 lbs/A	Begin application at dormant to popcorn stage, full bloom or petal fall. Reapply every 7 to 10 days if bloom is staggered and weather is rainy. Do not use less than 10 gallons of spray volume per acre if aerially applied.	Do not apply more than 19.2 lbs (14.4 lbs active) per acre per use season. Do not make last application later than 5 weeks after petal fall. Do not graze livestock in treated area. Minimum retreatment interval is 7 days. Do not apply this product with a U-boom device.
Apple	(See Pome Fruit)			
Asparagus	Cercospora Leaf Spot, Rust	2 lbs/A	Start applications when rust first appears and repeat at 10 day intervals. Four applications are usually sufficient.	Apply only on asparagus ferns after spears have been harvested. Do not apply within 180 days of harvest in all states except CA and AZ (120 days). Do not apply more than 8 lbs (6 lbs active) per acre per season.
Asparagus Crown (Planting Stock)	Crown Rot	1.0 lb/100 gals	Dip clean, loosely packed crowns into continuously agitated fungicide suspension for 5 minutes. Drain and plant as soon as possible.	Wash dirty crowns before dip treatment. Replace suspension in clean tank when discolored by soil.
Banana (Including Plantain)	Sigatoka	2-3 lbs/A	Apply when leaves first appear and repeat every 14 to 21 days or as required. Use sufficient water to provide adequate coverage.	Do not apply more than 30 lbs (22.5 lbs active) per acre per growing cycle. Minimum preharvest interval 0 days.
Barley, Oat, Rye, Wheat (Including Triticale)	Helminthosporium Leaf Spot, Leaf Rust, Septoria Glume Blotch, Septoria Leaf Spot, Tan Spot	2 lbs/A	Start application at onset of disease or when plants are in the tillering to jointing stage and repeat at 7 to 10 day intervals.	Do not make more than three applications during the season. Do not apply more than 6 lbs (4.5 lbs active) per acre per crop. Do not apply within 26 days of harvest. PHI for barley, rye, and wheat is Feekes Growth Stage 10.5 (typically 35-45 days), but no less than 26 days. Do not graze livestock in treated areas prior to harvest.
Broccoli	Alternaria Leaf Spot, Downy Mildew	1.6-2.1 lbs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10 day intervals, if needed. Use higher rates when conditions favor disease.	Do not apply more than 12.8 lbs (9.6 lbs active) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device.
Cabbage	Alternaria Leaf Spot, Downy Mildew	1.6-2.1 lbs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10 day intervals, if needed. Use higher rates when conditions favor disease.	Do not apply more than 12.8 lbs (9.6 lbs active) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device.

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Crop	Diseases Controlled	Rate of MANZATE PRO-STICK Per Application	Timing/Intervals (Also refer to Directions for Use)	Restrictions/Comments
Caprifig (Non-Food Use)	Endosepsis (Fusarium), Mold	4 lbs/100 gals	Prepare mamme figs by making a shallow cut through the eye and then hand dividing to avoid wasp injury. Submerge mamme figs in the continuously agitated suspension for at least 15 minutes. Drain before placement in trees.	Use fresh dipping suspension after treating 4 to 5 batches of figs.
Corn (Sweet Corn for Fresh Use or Processing; Popcorn; and Sweet Corn for Seed Production, including Hybrid Seed)	Common Rust, Helminthosporium Leaf Blight, Gray Leaf Spot	1.5 lbs/A	Use sufficient water for thorough coverage. Start applications when disease first appears and repeat at 4 to 7 day intervals.	Do not apply within 7 days of harvest. Do not apply more than 22.5 lbs (17 lbs active) per acre per crop east of the Mississippi and AR and LA. Do not apply more than 7.5 lbs (5.6 lbs active) per acre per crop west of the Mississippi except AR and LA. Do not apply to sweet corn in home gardens.
(Field and Field Corn for Hybrid Seed Production)				Do not apply within 40 days of harvest. Do not apply more than 15 lbs (11.25 lbs active) per acre per crop.
Cranberry	Fruit Rot	3-6 lbs/A	Start applications at mid-bloom and repeat at 7 to 10 day intervals.	Do not apply within 30 days of harvest. Do not apply more than 18 lbs (13.5 lbs active) per acre per season.
Cucumber	Anthracnose, Cercospora Leaf Spot, Downy Mildew, Gummy Stem Blight, Scab	2-3 lbs/A	Start applications when plants are in the two-leaf stage and repeat at 7 to 10 day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.	Do not apply within 5 days of harvest. Do not apply more than 24 lbs (18 lbs active) per acre per crop.
Cucurbit Crop Group Chayote, Chinese Wax Gourd, Citron Melon, Cucumber, Gherkin, Gourd, edible, Momordica spp., Muskmelon, Pumpkin, Squash, summer, Squash, winter, Watermelon	Alternaria Leaf Spot, Anthracnose, Cercospora Leaf Spot, Downy Mildew, Gummy Stem Blight, Scab	2-3 lbs/A	Start applications when the plants are in the two-leaf stage and repeat at 7 to 10 day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. For aerial applications, the minimum spray volume is 2 gallons per acre. Some cantaloupe varieties (i.e. Harvest Queen, Gold Star, Super Star, Sweet and Early, and Saticoy) are sensitive to MANZATE PRO-STICK fungicide. Consult State Cooperative Extension Service Specialist prior to use.	Do not apply more than 25.6 lbs (19.2 lbs active) per acre per year. Do not apply more than 8 applications per year. Do not apply within 5 days of harvest.
Fennel	Early Blight, Late Blight	2 lbs/A	Begin in plant beds at emergence. Repeat at 7 to 10 day intervals.	Do not apply within 14 days of harvest. Do not apply more than 16 lbs (12 lbs active) per acre per crop. Do not graze livestock in treated areas.

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Crop	Diseases Controlled	Rate of MANZATE PRO-STICK Per Application	Timing/Intervals (Also refer to Directions for Use)	Restrictions/Comments
Ginseng	Alternaria Blight	2 lbs/A	Start applications when disease first threatens and repeat every 7 to 10 days as needed. In Wisconsin, apply with ground equipment and a minimum of 80 gallons of water per acre.	Do not apply more than 24 lbs (18 lbs active) per acre per year. Do not apply more than 12 applications per year. Do not apply within 30 days of harvest.
Grape (East of the Rocky Mountains)	Black Rot, Bunch Rot, Deadarm, Downy Mildew	1.5-4 lbs/A	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1 1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7 to 10 day intervals until fruit is set. For late season control of black rot, deadarm and downy mildew, the use of other approved fungicides is suggested.	Do not apply within 66 days of harvest. Do not apply more than 24 lbs (18 lbs active) per acre per season.
Grape (West of the Rocky Mountains)	Black Rot, Bunch Rot, Deadarm, Downy Mildew	1.5-2.5 lbs/A	Apply in sufficient water to provide thorough coverage starting when new shoots are 1/2 to 1 1/2 inches long. Repeat when shoots are 3 to 5 inches long, when shoots are 8 to 10 inches long, and then at 7 to 10 day intervals until fruit is set. For late season control of black rot, deadarm and downy mildew, the use of other approved fungicides is suggested.	Do not apply within 66 days of harvest except in CA where no application can be made after bloom. Do not apply more than 7.5 lbs (5.6 lbs active) per acre per season.
Lettuce (Head, Leaf)	Anthracnose, Downy Mildew	1.6-2.1 lbs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10 day intervals, if needed. Use higher rates when conditions favor disease.	Remove residues from head lettuce by stripping and trimming. In California, do not apply more than 8.5 lbs (6.4 lbs active) per acre per crop and do not apply within 14 days of harvest. In states other than California, do not apply more than 12.8 lbs (9.6 lbs active) per acre per crop and do not apply within 10 days of harvest. For all states: minimum retreatment interval is 7 days. Do not apply this product with a U-boom device.
Melon Cantaloupe, Casaba, Crenshaw, Honeydew, Watermelon	Alternaria Leaf Spot, Anthracnose, Downy Mildew, Gummy Stem Blight, Cercospora Leaf Spot	2-3 lbs/A	Start applications when plants are in the two-leaf stage and repeat at 7 to 10 day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces. Some varieties are sensitive to MANZATE PRO-STICK fungicide. Consult State Cooperative Extension Service Specialist prior to use.	Do not apply within 5 days of harvest. Do not apply more than 24 lbs (18 lbs active) per acre per season.
Oat	(See Barley)			

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Crop	Diseases Controlled	Rate of MANZATE PRO-STICK Per Application	Timing/Intervals (Also refer to Directions for Use)	Restrictions/Comments
Onion (Dry Bulb), Garlic, Shallot	Botrytis Leaf Blight, Downy Mildew, Neck Rot, Purple Blotch	3 lbs/A	Follow a protective spray schedule starting when diseases are first reported in the area and repeat at 7 day intervals throughout the season.	Do not apply within 7 days of harvest. Do not apply to exposed bulbs. Do not apply more than 30 lbs (22.5 lbs active) per acre per crop.
	Smut (furrow drench)	3 lbs/A	Apply 3 lbs per acre as a furrow drench at time of planting onion seeds. Use 75 to 125 gallons of water per acre.	Do not use more than 2.25 lbs active per acre (29,000 linear feet of furrow) with an 18 inch row spacing.
Papaya	Anthracnose (Colletotricum), Phytophthora Fruit Rot, Black Spot (Cercospora)	2.0-2.5 lbs/A (minimum 50 gals per acre)	Begin at flowering; treat central column crown, blossom area and developing fruit. Repeat at 14 to 21 day intervals.	Do not use more than 37 lbs (28 lbs active) per acre per year, i.e. do not make more than 14 applications at the maximum use rate per year. Minimum pre-harvest interval 0 days.
Peanut	Ascochyta Web Blotch, Cercospora Leaf Spot, Rust	1-2 lbs/A	Start application when disease first appears or is reported in area. Repeat sprays at 7 to 14 day intervals. Reduce sprays to a 7 day interval during humid weather.	Do not apply within 14 days of harvest. Do not use more than 16 lbs (12 lbs active) per acre per crop. Do not feed treated vines to livestock.
Pear	(See Pome Fruit)			
Pepper	Anthracnose, Bacterial Spot *(Xanthomonas axonopodis pv. vesicatoria)*, Cercospora Leaf Spot (Frogeye Spot), Phytophthora Blight, Ripe Rot	West of the Mississippi: 1.6-2.1 lbs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10 day intervals, if needed. Use higher rates when conditions favor disease.	Do not apply more than 12.8 lbs (9.6 lbs active) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device.
		East of the Mississippi: 1.6-3.2 lbs/A	Begin applications prior to disease development and when conditions are favorable for disease development. Apply at 7 to 10 day intervals, if needed. Use higher rates when conditions favor disease.	Do not apply more than 19.2 lbs (14.4 lbs active) per acre per season. Minimum retreatment interval is 7 days. Minimum preharvest interval is 7 days. Do not apply this product with a U-boom device.

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Crop	Diseases Controlled	Rate of MANZATE PRO-STICK Per Application	Timing/Intervals (Also refer to Directions for Use)	Restrictions/Comments
Pome Fruit Apple, Pear, Crabapple, Quince	Rusts, Scab, Fabrea Leaf Spot	6.0 lbs/A Maximum per acre use rate based on thorough coverage dilute sprays. Use 50 gals minimum per acre. Consult State Extension Service if necessary to adjust for variable tree size.	**Pre-Bloom/Bloom Use:** Begin application at 1/4 to 1/2 inch green tip and continue on a 7 to 10 day schedule through bloom. Use either the "Pre-Bloom/Bloom" or "Extended Application" schedule. **DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES**	Do not apply more than 6 lbs (4.5 lbs active) per acre per application. Do not apply after bloom. Do not apply more than 24 lbs (18 lbs active) per acre per year. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program.
		3.0 lbs/A Maximum per acre use rate based on thorough coverage dilute sprays. Use 50 gals minimum per acre. Consult State Extension Service if necessary to adjust for variable tree size.	**Extended Application Schedule or for Use in Tank Mixtures:** For implementation of IPM programs, applications based on tree-row volume, or for use as a resistance management tool: begin applications at 1/4 to 1/2 inch green tip and continue applications on a 7 to 10 day schedule through the second cover spray. Use either the "Pre-Bloom/Bloom" or "Extended Application" schedule. **DO NOT COMBINE OR INTEGRATE THE TWO TREATMENT SCHEDULES**	Do not apply more than 3 lbs (2.25 lbs active) per acre per application. Do not apply within 77 days of harvest. Do not apply more than 21 lbs (15.75 lbs active) per acre per year. Do not graze livestock in treated areas. It is recommended that this product be used in an Integrated Pest Management Program.
Potato	Early Blight, Late Blight, Black Dot **Disease Suppression:** Botrytis	1-2 lbs/A	Begin applications when plants are 4 to 6 inches high by applying 1 lb per acre. As the vines increase in size, apply 1.5 to 2 lbs per acre at intervals of 5 to 10 days or 1 lb per acre at 3 to 5 day intervals.	Do not apply more than 15 lbs (11.2 lbs active) per acre per crop. Do not use within 3 days of harvest in CT, DE, FL, MA, ME, MI, NH, NY, OH, PA, RI, VT, WI, and within 14 days elsewhere. Vine-kill should occur 14 days before harvest. It is recommended that this product be used in an Integrated Pest Management Program.

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Crop	Diseases Controlled	Rate of MANZATE PRO-STICK Per Application	Timing/Intervals (Also refer to Directions for Use)	Restrictions/Comments
Potato (Seedpiece Treatment)	Fusarium Decay, Seedborne Common Scab	1.25 lbs/50 gals	Dip whole or cut potato tubers in 1.25 lbs MANZATE PRO-STICK fungicide per 50 gallons of water. Place treated tubers in a clean container following treatment and plant as soon as possible. Spread treated seedpieces in a cool place if held before planting.	Do not use treated seed potatoes for food or feed purposes. Seed-pieces that have been treated with this product that are then to be packaged or bagged for future use must contain the following labeling on the outside of the seed-piece package or bag: "Treated seed-pieces, treated with the fungicide mancozeb – Do Not Use for Food, Feed, or Oil Purposes." When opening this bag or loading/pouring the treated seed-pieces, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a NIOSH-approved respirator with a dust/mist filter with MSHA/ NIOSH approval number prefix TC-21C or any R, P, or HE filter. After the seed pieces have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seed pieces are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil/media subsurface."
Squash (Summer Squash, Including Edible Gourd)	Downy Mildew	2-3 lbs/A	Start applications when plants are in the two-leaf stage and repeat at 7 to 10 day intervals. Use sufficient water and direct spray to provide thorough coverage of both upper and lower leaf surfaces.	Do not apply within 5 days of harvest. Do not apply more than 24 lbs (18 lbs active) per acre per crop.
Sugar Beet	Cercospora Leaf Spot	1.5-2 lbs/A	Begin when disease first threatens. Repeat at 7 to 10 day intervals.	Do not apply within 14 days of harvest. Do not apply more than 14 lbs (10.5 lbs active) per acre per crop. Do not feed treated sugar beet tops to livestock.

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Crop	Diseases Controlled	Rate of MANZATE PRO-STICK Per Application	Timing/Intervals (Also refer to Directions for Use)	Restrictions/Comments
Tomato (East of the Mississippi River)	Anthracnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot	0.75-1.5 lbs/A	Start application when seedlings emerge or transplants are set. Repeat at 3 to 7 day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 22.4 lbs (16.8 lbs active) per acre per crop.
	Bacterial Speck and Spot	1.5-3 lbs/A	Start application when seedlings emerge or transplants are set. Repeat at 7 to 10 day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 22.4 lbs (16.8 lbs active) per acre per crop. Use a full rate of a fixed copper fungicide in tank mix combination with a half to full rate of MANZATE PRO-STICK. Follow the application interval on the copper fungicide label.
Tomato (West of the Mississippi River)	Anthracnose, Early Blight, Gray Leaf Spot, Late Blight, Leaf Mold, Septoria Leaf Spot	0.75-1.0 lbs/A	Start application when seedlings emerge or transplants are set. Repeat at 3 to 7 day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 8.5 lbs (6.4 lbs active) per acre per crop.
	Bacterial Speck and Spot	1.5-2 lbs/A	Start application when seedlings emerge or transplants are set. Repeat at 7 to 10 day intervals throughout the season.	Do not apply within 5 days of harvest. Do not apply more than 8.5 lbs (6.4 lbs active) per acre per crop. Use a full rate of a fixed copper fungicide in tank mix combination with a half to full rate of MANZATE PRO-STICK. Follow the application interval on the copper fungicide label.
Tropical Fruits Limited to: Atemoya, Cherimoya, Custard Apple, Sugar Apple, Sweetsop	Anthracnose	2-2.5 lbs/A	Begin applications at flowering and continue at a 7 day retreatment interval. Applications made with aerial equipment must be made in a minimum spray volume of 10 gallons per acre.	Do not apply more than 35 lbs (26.25 lbs active) per acre per year. Do not apply more than 14 applications per year. Applications may be made up to the day of harvest.
Tropical Fruits Limited to: Canistel, Mamey Sapote, Mango, Sapodilla, Star Apple (Caimito), White Sapote	Anthracnose, Black Spot *(Cercospora)*, Phytophthora Fruit Rot	2-2.5 lbs/A	Start applications at flowering and continue at 14 to 21 day intervals. Direct spray to crown and blossom area. Use 20 to 100 gallons water per acre.	Do not apply more than 37.3 lbs (28 lbs active) per acre per year. Do not apply more than 14 applications per year. Applications may be made up to the day of harvest.
Watermelon	(See Melon)			
Wheat (Including Triticale)	(See Barley)			

SEED TREATMENTS

For commercial treatment only. Do not treat seed at or immediately before planting. Users making commercial seed applications must follow provisions within the Non-Agricultural Use Requirements Box. Users conducting seed treatments on agricultural establishments must follow provisions within the Agricultural Use Requirements Box.

Seed to be treated must be clean and well-cured prior to treatment.

MANZATE PRO-STICK must be applied to dry seed with conventional slurry or mist seed treating equipment, or as a plant-box application. For best results, seed must be covered uniformly with fungicide. For seed treatment, a dye must be added to the Manzate Pro-Stick treating slurry which will impart an unnatural color to the seed.

Seeds that have been treated with this product that are then packaged or bagged for future use must contain the following labeling on the outside of the seed package or bag:

"Treated Seed, treated with the fungicide mancozeb – Do Not Use for Food, Feed or Oil Purposes.

When opening this bag or loading/pouring the treated seed, wear long-sleeved shirt, long pants, shoes, socks, chemical resistant gloves, and a NIOSH-approved respirator with a dust/mist filter with MSHA/NIOSH approval number prefix TC-21C or any R, P, or HE filter.

After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours. Exception: Once the seeds are planted in soil or other planting media, the Worker Protection Standard allows workers to enter the treated area without restriction if there will be no worker contact with the soil/media subsurface. Excess treated seed may be used for ethanol production only if (1) byproducts are not used for livestock feed and (2) no measurable residues of pesticide remain in ethanol byproducts that are used in agronomic practice."

Crop	Diseases	Seed Treatment Rate- Apply as a Slurry	
Barley	Bunt, Covered Smut, Damping-Off, Fake Loose Smut, Seed Decay, Seedling Blights	1.3 to 2.0 oz/bu	2.7 to 4.2 oz/100 lbs
Corn	Damping-Off, Seed Rot, Seedling Blights	1.5 to 3.0 oz/bu	2.7 to 5.4 oz/100 lbs
Cotton Acid Delinted	Damping-Off, Seedling Blights	--	3.0 oz/100 lbs
Cotton Reginned	Damping-Off, Seedling Blights	--	6.0 oz/100 lbs
Flax	Seed Decay, Seedling Blights, Damping-Off	2.0 to 4.0 oz/bu	3.6 to 7.1 oz/100 lbs
Oat	Damping-Off, Seedling Blights, Seed Decay, Smuts	1.3 to 2.0 oz/bu	4.0 to 6.3 oz/100 lbs
Peanut (Shelled)	Damping-Off, Seed Rots, Seedling Blights	2.0 to 4.0 oz/bu	8.0 to 16.0 oz/100 lbs
Rice	Achyla, Other Soil and Seedborne Fungi Causing Seed Rot and Reduced Seedling Vigor	--	2.0 to 4.0 oz/100 lbs Apply before, during or after soaking in water
Rye	Bunt, Covered Smut, Damping-Off, Seed Decay, Seedling Blights	1.3 to 2.0 oz/bu	2.3 to 3.6 oz/100 lbs
Safflower	*Puccinia carthami* (Which Causes Foot-and-Rot Disease and Foliage Rust Disease)	--	2.0 oz/100 lbs
Sorghum	Covered Kernel Smut, Damping-Off, Seedling Blights, Seed Rots	1.5 to 2.5 oz/bu	2.7 to 4.5 oz/100 lbs
Tomato	Damping-Off, Seedling Blights, Seed Rots	--	8.0 oz/100 lbs
Wheat (including Triticale)	Bunt, Covered Smut, Damping-Off, Seed Decay, Seedling Blights	1.3 to 2.0 oz/bu	2.2 to 3.3 oz/100 lbs

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Important-Never allow MANZATE PRO-STICK to become wet during storage. This may lead to certain chemical changes which will reduce the effectiveness of MANZATE PRO-STICK as a fungicide and create vapors which may be flammable. Keep container closed when not in use. Store product in original container only, away from other pesticides, fertilizer, food or feed in a secure dry area.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available, or dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

ATTENTION: This product contains mancozeb and ETU, chemicals known to the State of California to cause cancer in laboratory animals. ETU is also known to the State of California to cause birth defects or other reproductive harm in laboratory animals.

IMPORTANT INFORMATION
READ BEFORE USING PRODUCT

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of United Phosphorus, Inc. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of United Phosphorus, Inc. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold United Phosphorus, Inc. and Seller harmless for any claims relating to such factors.

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To the extent consistent with applicable law, United Phosphorus, Inc. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF UNITED PHOSPHORUS, INC. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF UNITED PHOSPHORUS, INC. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

United Phosphorus, Inc. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of United Phosphorus, Inc.

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