TREE FRUITS AND TREE NUTS (DORMANT/DELAYED DORMANT SPRAYS) - APPLE

General Information

Whirlwind is an emulsifiable concentrate for use in listed crops. Target pests and application rates are provided in the accompanying tables.

The label booklet is not valid for use of this product in the state of Mississippi. For use in the state of Mississippi, refer to Whirlwind supplemental labeling entitled “Use Directions for the State of Mississippi.”

General Use Precautions

Insect control may be reduced at low spray volumes under high temperature and wind conditions.

Some reduction in insect control may occur under unusually cool conditions.

Flood irrigation: To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours following a soil surface or foliar application of Whirlwind.

Application Guidelines

BROADCAST FOLIAR APPLICATION

Apply with conventional power-operated spray equipment using nozzles and spray pressures recommended for insecticides. Apply Whirlwind in a spray volume of not less than 2 gallons per acre for aerial application equipment (fixed-wing or helicopter) or not less than 10 gallons per acre for ground equipment, unless otherwise specified. Increase spray volume to ensure adequate coverage with increased density and height of crop canopy. See Spray Drift Precautions section for recommendations on droplet size.

GROUND APPLICATION: Orient the boom and nozzles so that uniform coverage is obtained. The swath width should not be wider than the boom. Follow nozzle manufacturer’s recommendations for insecticide nozzles with respect to nozzle
BROADCAST SOIL APPLICATION

Apply with conventional power-operated spray equipment that will apply the product uniformly to the soil surface. Use nozzles that produce medium or coarse droplets (235-400 microns). Unless otherwise indicated, a spray volume of 10 gallons or more per acre is recommended. For band application, use proportionally less spray volume.

AERIAL APPLICATION

Use a minimum spray volume of 2 gallons per acre and follow recommendations for best management practices for aerial application, above.

Marking of swaths by flagging, permanent markers or use of GPS equipment is recommended.

CHEMIGATION (SPRINKLER IRRIGATION)

Whirlwind may be applied to the following crops through sprinkler irrigation equipment: alfalfa, almond (orchard floors only), citrus (orchard floors only), corn (field and sweet), cotton, cranberry, mint, sorghum, soybeans, sugarbeet, orchard floors (pecan and walnut), walnut (orchard floors only), and wheat, or other crops as specified in supplemental labeling. Do not apply this product by chemigation unless specified in crop-specific directions in the label or Dow AgroSciences supplemental labeling. Do not apply to labeled crops through any other type of irrigation system.

Note: Unless otherwise indicated in specific use directions, the application rates for chemigation are the same as those recommended for broadcast application.

Special Use Directions for Sprinkler Irrigation

The following use directions must be followed when Whirlwind is applied through sprinkler irrigation systems. Thoroughly clean the injection system and tank of any fertilizer or chemical residues, and dispose of the residues according to state and federal laws. Flush the injector with soap and water. Determine the amount of Whirlwind needed to cover the desired acreage. Mix according to instructions in the Mixing Directions section and bring mixture to desired volume. Do not add crop oil when Whirlwind is applied by chemigation. Maintain continuous agitation during mixing and throughout the application period. Set the sprinkler system to deliver
the desired inches of water per acre. Start the water pump and sprinkler, and let the system achieve the desired pressure and speed before starting the injector. Start the injector and calibrate the injector system according to Calibration instructions in the following Special Use Precautions section. The mixture containing Whirlwind must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving to ensure uniform application at the correct rate. When the application is finished, flush and clean the entire irrigation and injector system prior to shutting down the system.

Limitations, Restrictions, and Exceptions

Apply as a dormant or delayed dormant spray. While Whirlwind may be used without oil, oil is recommended to control additional pests such as European red mite. See precautions for use of oil below. Apply as a concentrate or dilute spray using conventional, power-operated spray equipment. For dilute sprays (greater than 200 gpa), use sufficient spray volume to completely wet tree foliage, but not to point of runoff. For concentrate sprays (less than 200 gpa), uniformly apply an equivalent amount of Whirlwind per acre.

Use a higher rate in the rate range when there is increased pest pressure.

Pest-Specific Use Directions:

1. Application rate is based on 200 to 600 gpa as a dilute spray depending on the size of the trees (use a minimum of 1 1/2 pint per acre).

Specific Use Precautions:

- Cold or dry conditions may cause Whirlwind plus oil sprays to infuse into trees, resulting in bud damage or bud drop. Do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated.

- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours of application of Whirlwind.

- Avoid contact with foliage in sweet cherries as premature leaf drop may result.

Specific Use Restrictions:

- Do not use more than 4 pints of Whirlwind (2 lb ai chlorpyrifos) per acre per
season as a dormant/delayed dormant application.

- Post-bloom application to apples is prohibited.

- Do not make a soil or foliar application of Whirlwind or products containing chlorpyrifos within 10 days of a dormant/delayed dormant application of chlorpyrifos to the orchard.

- Make only 1 application of chlorpyrifos during the dormant season.

- Do not allow meat or dairy animals to graze in treated orchards.

Additional Restrictions Specific to California:

- Do not use more than 1% dormant oil in almond orchards less than 4 years old.

- Use a minimum of 250 gpa of total spray volume.

- Use up to 2% Supreme oil with no more than 4 gpa on almonds.

- Use up to 2% Supreme oil with no more than 6 gpa on peaches and nectarines.

- Refer to the University of California pest management guide for apples, pears, plums, and prunes.

- In orchards with high overwintering populations of European red mite or brown almond mite, use higher spray volumes that allow for the use of higher per acre rates of oil.

- Do not use any adjuvants or surfactants in addition to, or as a substitute for, a petroleum spray oil in a tank-mix with Whirlwind.

- Do not apply on almonds in the following counties in California: Butte, Colusa, Glenn, Solano, Sutter, Tehama, Yolo, and Yuba.

Use a minimum of 1.5 pt/acre

Method
Concentrate Spray
Dilute Spray
Rates
• Restricted Entry Interval

4 days

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

Dormant or delayed dormant