



Orchard Spraying and Following Label Requirements on Common Tree Fruit Pesticides

Compliance with pesticide labels requires managers and applicators to follow pesticide label directions. The “Directions for Use” section has mandatory language, noted in **bold type** below, that must be followed to be in compliance with federal and state laws. Mandatory label language is stated in this fact sheet for three common pesticides; these statements come directly from the label.

Chlorpyrifos* language excerpt from the label

Orchard Airblast Application

The following **mandatory** spray drift best management practices **are required** to reduce the likelihood of off-target drift movement from airblast applications.

- **Direct nozzles** so spray is not projected above the canopies.
- **Apply only** when wind speed is 3 to 10 mph at the application site as measured by an anemometer outside of the orchard/vineyard on the upwind side. *(WSU recommends applications be made in 3-7 mph winds to increase deposition on the canopy)*
- Outward pointing nozzles **must be** shut off when turning corners at row ends.

Lime Sulfur* language excerpt from the label

For airblast applications:

Sprays must be directed into the crop canopy, rather than above the canopy. Outward pointing nozzles should be turned off at row ends and when spraying outer rows.

TEMPERATURE INVERSION:

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.

Mineral Oil* (dormant oil) excerpt from the label

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, and relative humidity)



and method of application (e.g., ground, aerial, or airblast) can influence pesticide drift. The **applicator and grower must** evaluate all factors and make appropriate adjustments when applying this product. **The restrictions** pertaining to wind speed, temperature inversions, and droplet size **apply to all the methods of application permitted for this product.**

WIND SPEED

Do not apply at wind speeds greater than 15 mph at the application site. *(WSU recommends 3-7 mph winds)*

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.

AIRBLAST APPLICATIONS

Turn off outward pointing nozzles at row ends and when spraying outer row. To minimize spray loss over the top in orchard applications, **spray must be directed into the canopy.**

Don't Assume Your Sprayer is Adjusted Properly
Learn About Sprayer Set Up and Operation with Airblast 101—A handbook for best practices in Airblast Spraying. It describes best practices in airblast spraying in clear, conversational language.

A **FREE** downloadable version of Airblast101 is available at <http://sprayers101.com/articles/multimedia/airblast101/>
This friendly handbook is aimed at airblast sprayer

*Active ingredients were used for review. Consult WSU Pesticide Information Center Online (PICOL) Database <http://cru66.cahe.wsu.edu/LabelTolerance.html> for product names and links to labels