



# Orchard Spraying and Following Label Requirements on Common Tree Fruit Pesticides

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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 calibration and configuration.*

\*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.

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