Volatile organic compounds emissions from nonfumigant pesticides
VOC Emissions Regulations

- Regulations adopted by DPR to cut ground-level smog-producing emissions of VOCs
- Trigger level of emissions set
  - Pesticide use limitations to reduce VOC emissions from certain nonfumigant pesticide products if exceeded
- In 2013, the VOC emissions exceeded the trigger and limitations went into effect May 1, 2015

<table>
<thead>
<tr>
<th>Primary Active Ingredient</th>
<th>Emission Potential (EP) Threshold (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abamectin</td>
<td>35</td>
</tr>
<tr>
<td>Chlorpyrifos</td>
<td>25</td>
</tr>
<tr>
<td>Gibberellins</td>
<td>25</td>
</tr>
<tr>
<td>Oxyfluorfen</td>
<td>15</td>
</tr>
</tbody>
</table>
Sales and Use Restrictions

- High-VOC products containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen
- Applied in San Joaquin Valley
- Between May 1 and October 31
- To alfalfa, almonds, citrus, cotton, grapes, pistachios, or walnuts
- Written recommendation from PCA is required
  - Keep for two years
Restricted Use of High-VOC products

- **May 1 through October 31**
  - Containing abamectin, chlorpyrifos, gibberellins, or oxyfluorfen
  - Used on alfalfa, cotton, almonds, walnuts, pistachios, grapes, citrus
- **No restrictions on using low VOC versions of these materials**
  - Ex: Lorsban Advanced, GoalTender, Agri-Mek SC
Exceptions for High-VOC Products

- Chlorpyrifos to control aphids on cotton
- Giberrellins: 16 grams a.i. per acre maximum
- Oxyfluorfen: 0.125 (1/8) pounds a.i. per acre maximum
Reducing VOC Emissions from Nonfumigant Pesticide Products

Back to Volatile Organic Compound (VOC) Emissions from Pesticides

Subscribe to receive periodic e-mail updates on activities of DPR's VOC Program.

Regulations to reduce emissions of volatile organic compounds (VOCs) from nonfumigant pesticides apply to high-VOC products containing abamectin, chlorpyrifos, giberellins, or oxyfluorfen when used in the San Joaquin Valley ozone nonattainment area. The regulations do not apply to low-VOC products for any active ingredients.

The prohibitions on the high-VOC products will be in effect May 1, 2017 - October 31, 2017.

General information:

- Fact sheet, PDF (57 kb) with overview of regulations
- The San Joaquin Valley ozone nonattainment area includes all of the following counties: Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare, and
  - Parts of Kern County - large map, PDF (648 kb), detailed map, PDF (431 kb), list, PDF (10 kb) of
township-range-section
- Regulations associated with reducing VOC emissions from nontumigant products

Products designated as high-VOC, low-VOC, or excluded — Products containing abamectin, chlorpyrifos, giberellins, or oxyfluorfen are designated as either high-VOC, low-VOC, or excluded from the regulations. VOC requirements pertain only to high-VOC products. The designation for a specific product is based on the active and inert ingredients in the product, the amounts of the ingredients, and if the label includes agricultural uses.

- Criteria and lists of high-VOC, low-VOC, and excluded products, PDF (122 kb) (Updated June 7, 2017)

Sales and use requirements for high-VOC products — The regulations include requirements for pest control dealers selling a high-VOC product for use in the San Joaquin Valley. The regulations also include requirements for agricultural pest control advisers and growers prior to using a high-VOC product between May 1 and October 31 in the San Joaquin Valley for the following seven crops: alfalfa, almonds, citrus, cotton, grapes, pistachios, or walnuts. There are no VOC requirements to sell or use low-VOC or excluded products.

- Pest control dealers fact sheet, PDF (57 kb)
- Agricultural pest control advisers fact sheet, PDF (59 kb)
- Growers fact sheet, PDF (58 kb)

http://www.cdpr.ca.gov/docs/emon/vocs/vocproj/reduce_nonfumigant.htm
## Low-VOC Chlorpyrifos Products

### Low-VOC Chlorpyrifos Products, EP ≤ 25.0% (20)

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Registration Number</th>
<th>Registrant</th>
<th>Formulation</th>
<th>EP (%)</th>
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<tbody>
<tr>
<td>Prescription Treatment Brand Duraguard ME</td>
<td>499-367-ZA</td>
<td>Whitmire Micro-Gen Research</td>
<td>Aqueous Concentrate</td>
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<tr>
<td>Duraguard ME Microencapsulated Insecticide</td>
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<td>Whitmire Micro-Gen Research</td>
<td>Aqueous Concentrate</td>
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<td>Dow AgroSciences LLC</td>
<td>Wettable Powder</td>
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<td>CPF 15G</td>
<td>83222-34-AA</td>
<td>Direct Ag Source LLC</td>
<td>Granular/Flake</td>
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<td>Rainbow Fire Ant &amp; Insect Killer</td>
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<td>Rainbow Technology Corporation</td>
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<td>Andersons Lawn Fertilizer</td>
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Merced County Permit Conditions: Chlorpyrifos
Merced County Permit Condition 16

- Chlorpyrifos labeled for production ag.
- Purpose
  - During applications: to minimize bystander exposure and offsite movement of chlorpyrifos
  - After applications: to reduce runoff
## Chlorpyrifos: Setback distances

<table>
<thead>
<tr>
<th>Application Method</th>
<th>Min. Setback Distance</th>
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<tr>
<td>Ground boom</td>
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<tr>
<td>Chemigation</td>
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<tr>
<td>Airblast</td>
<td>50 feet</td>
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<tr>
<td>Aerial</td>
<td>150 feet</td>
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</table>
Setback Distances

- **Purpose:** to protect bystanders and sensitive sites
  - Houses
  - Aquatic sites
- Extends in all directions from the edge of the sensitive site to the edge of the treatment area
- Do not apply chlorpyrifos if any bystanders are in the setback area
Chlorpyrifos: Application Conditions

- Wind speed between 3mph and 10 mph
  - Measured four feet above ground
- Incorporate/clean-up granules spilled during loading or visible on the soil surface in turn areas
Notice of Intent (NOI)

- NOIs specify site and time of application for California Restricted Materials
  - Chlorpyrifos became a California Restricted Material 7/1/15
- Can be submitted by:
  - Property operator, authorized representative, or PCB
- 24hr allows CAC to evaluate application
How to Submit NOIs and PURs - Online

- Submit **online**
- CalAgPermits: https://www.calagpermits.org
- Call us to set up your user name and password
CalAgPermits

Welcome

Ag PURs
- Enter a new 7 Day Job Report for Commercial Applicators
- Enter a new Monthly Report for Grower Applications

SPURs
- Enter a new Structural Monthly Summary report (MSPUR)
- Enter a new Non-structural MSPUR
- Enter a new Zero Usage Report

NOIs
- Enter a new Notice of Intent

Permits
- Select Permit for viewing
- View Permit

CEDTS
- Upload pre-formatted CEDTS data

Help and Training
- Training Videos
- FAQs Under Construction
# CalAgPermits

## Notice of Intent

### Report Status:
- Submittal Status:

### Time Stamp:

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<td>Proposed Treated Area - Units</td>
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<tr>
<td>Days Reentry</td>
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<tr>
<td>Days Pre-Harvest</td>
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### CalAgPermits

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<th>Planted Area - Units</th>
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<th>Commodity to be Treated</th>
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<th>Days Re-entry</th>
<th>Days Pre-harvest</th>
<th>Applied/Supervised By</th>
<th>Reviewed By - Date/Time</th>
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<th>Total Product Used - Units</th>
<th>Target Pest</th>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No records to display.

Submitted By: [ ]

Date/Time: [ ]
Notification to Beekeepers
Merced County Permit Condition 3

- Environmental hazards statements on the label: toxic or highly toxic to bees
- Applications shall not be made when crop or weed is in bloom
  - In the application site
  - Adjacent borders
Bee Protection

- **Bee notification (bee check)**
  - Applicator: call Merced CAC
  - Provide applicator name, grower, crop, pesticides toxic to bees, section-township-range
  - Merced CAC will provide beekeepers info within one mile of property
    - Only if beekeepers requested notification
Bee Keeper Notification

- Includes: date and time of planned pesticide application, location, crop, acreage, application method, pesticide name and amount
- Notify bee keeper 48 hours prior to application
If the product label states that the pesticide is toxic or highly toxic to bees exposed to “residues on blooming crops or weeds”, applications are prohibited if temperatures are forecasted to be above 55°F during daylight hours on the day following application and bees are visiting the treatment area.
In an ongoing effort to protect bees and other pollinators, the U.S. Environmental Protection Agency (EPA) has developed new pesticide labels that prohibit use of some neonicotinoid pesticide products where bees are present. The new labels have a “bee advisory box” and icon with information on routes of exposure and spray drift precautions to protect bees.
Permit Conditions

- Carbaryl (Sevin) on alfalfa
  - If bloom is present in the treatment area and bees are pollinating surrounding crops, notices of intent shall not be approved.
ENVIRONMENTAL HAZARDS
This product is toxic to wildlife and aquatic invertebrates. This product is highly toxic to bees and other pollinators exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are foraging in the treatment area.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Dimethoate is known to leach through soil into groundwater under certain conditions as a result of leaching. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. This product may contaminate water through drift of spray in wind. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams and rivers will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

A vegetative filter strip constructed and maintained in accordance with the 2000 Natural Resources Conservation Service publication Conservation Buffers to Reduce Pesticide Losses (http://permanent.access.gpo.gov/psb018/www.srcs.usda.gov/water/quality/common/pestmg/files/newconbuf.pdf) will significantly reduce the potential for contamination of water from rainfall-runoff.
ENVIRONMENTAL HAZARDS

This product is toxic to wildlife and aquatic invertebrates. This product is highly toxic to bees and other pollinators exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are foraging in the treatment area.
SPECIMEN LABEL

RESTRICTED USE PESTICIDE

For retail sale and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator’s certification.

Lorsban Advanced

INSECTICIDE

Trademark of The Dow Chemical Company (“Dow”) or an affiliated company of Dow

For control of listed insects infesting certain field, fruit, nut, and vegetable crops.

Active ingredient:
- Chlorpyrifos: 0.0-diethyl-O-(2,6-diethyl-4-pyridyl)phosphorothioate (40.2%)
- Other ingredients: (59.8%)
- Total: (100.0%)

Contains 3.75 lb of chlorpyrifos per gallon.

Contains petroleum distillate.

Precautionary Statements

Hazards to Humans and Domestic Animals

EPA Reg. No. 62719-591

WARNING

May Be Fatal if Swallowed • Causes Skin Irritation • Causes Moderate Eye Irritation • Harmful if Inhaled • Prolonged or Frequently Repeated Skin Contact May Cause Allergic Reactions in Some Individuals

Do not get on skin or on clothing. Avoid contact with eyes and breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

First Aid

Organophosphate

If swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. Give activated charcoal if sent up contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. 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.

If in eyes: Flush eyes with plenty of water for 15-20 minutes. Remove contact lens, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

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.

Note to physician: Chlorpyrifos is a cholinesterase inhibitor. Treat symptomatically. If exposed, wash skin and eyes with plenty of water. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration,

Personal Protective Equipment (PPE)

Materials that are chemical-resistant to this product are barrier laminate and viton >1.4 mils.

Misters and loaders using a mechanical transfer loading system and applicators using aerial application equipment must wear:
- Long-sleeved shirt and long pants
- Shoes and socks
- In addition to the above, misters and loaders using a mechanical transfer loading system must wear:
  - Chemical-resistant gloves
  - Chemical-resistant apron
  - A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21G or a NIOSH-approved respirator with any P, R, or H2 filter

See Engineering Controls for additional requirements.

All other misters, loaders, applicators and handlers must wear:
- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant apron when mixing or loading or exposed to the concentrate
- Chemical-resistant towelettes plus socks
- Chemical-resistant headgear for overhead exposure
- A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21G or a NIOSH-approved respirator with any P, R, or H2 filter

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

Engineering Controls

Misters and loaders supporting aerial application must use a mechanical transfer system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)] for dermal protection, and must:
- Wear the personal protective equipment required above for misters/ loaders
- Wear protective eyewear if the system operates under pressure, and
- Be provided and have immediately available for use in an emergency, such as broken package, spill, or equipment breakdown; coveralls, chemical-resistant footwear and chemical-resistant headgear if overhead exposure

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(4)].

Use of human flagging is prohibited. Mechanical flagging equipment must be used.

When handlers use closed cab motorized ground application equipment, in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(4)], 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 clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Environmental Hazards

This pesticide is toxic to fish, aquatic invertebrates, small mammals and birds. Do not apply directly to water, or to areas where surface water is present, or to tidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or residue. This product is highly toxic to bees. Avoid exposure to direct treatment on blooming crops or weeds if bees are visiting the treatment area.

Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
Environmental Hazards
This pesticide is toxic to fish, aquatic invertebrates, small mammals and birds. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwaters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
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.

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.

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. Do not use foggers on areas where herbicides will be applied. Do not apply to livestock, wells, or adjoining crops.

Do not use well water to collect or runoff and pose a hazard to livestock, wells, or adjoining crops.

Do not enter treated area during the reentry interval specified in the Agricultural Use Requirements section of this label unless required PPE is worn.

Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units.

### Mixing Directions

**Lorsban Advanced – Alone**

To prepare the spray, add a portion of the required amount of water to the spray tank and, with the spray tank agitator operating, add Lorsban Advanced. Complete filling the tank with the balance of water needed. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture.

**Lorsban Advanced – Tank Mix**

Lorsban Advanced is compatible with insecticides, miticides, fungicides, and non-pressure fertilizer solutions except for alkaline materials, such as Bordeaux mixtures and lime. Conduct a small jar compatibility test prior to tank mixing. Prepare tank mixtures in the same manner as directed above for use of Lorsban Advanced alone. When tank mixing Lorsban Advanced with herbicides, add wettable powders first, followable second, and emulsifiable concentrates last. For best results when a fertilizer solution is involved, use a fertilizer pesticide compatibility agent, such as Unite or Complex. Maintain constant agitation during both mixing and application to ensure uniformity of the spray mixture. Do not allow spray mixtures to stand overnight.

### Tank Mix Compatibility Tests: Test compatibility of the intended tank mixture before adding Lorsban Advanced to the spray or mix tank. Add proportional amounts of each tank mix ingredient to a clear glass pint or quart jar with a lid, cap it, invert the jar several times. Observe the mixture for approximately 1/2 hour. If the mixture bates-up, forms flakes, sludges, jels, oil or layers or other precipitates that do not readily redispense, it is an incompatible mixture that must not be used.

### Uses

**Alfalfa**

Not for use in Mississippi

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Apply as a broadcast foliar spray using aircraft or ground spray equipment. Use a higher rate in the rate range for increased pest pressure. Use a minimum spray volume of 2 gpa for aerobic application (fixed wing or helicopter) or 10 gpa for ground equipment. Use a spray volume of 5 to 20 gpa by air. Use ground when foliage is dense and/or pest population is high and/or under high temperature and wind conditions. Some reduction in insect control may occur under unusually cool conditions.

Chemigation: Lorsban Advanced may be applied through sprinkler irrigation systems to control listed foliar pests. Use specified broadcast application rates. See Chemigation Application section.

### Target Pests

<table>
<thead>
<tr>
<th>Pests</th>
<th>Lorsban Advanced (g/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>corn rootworm adults (spotted cucumber beetle)</td>
<td>0.5 - 1</td>
</tr>
<tr>
<td>leafhoppers</td>
<td></td>
</tr>
<tr>
<td>alfalfa blotch leaf miner</td>
<td>1 - 2</td>
</tr>
<tr>
<td>alfalfa caterpillar</td>
<td></td>
</tr>
<tr>
<td>alfalfa weevil larvae and adults</td>
<td></td>
</tr>
<tr>
<td>armyworms</td>
<td></td>
</tr>
<tr>
<td>blue alfalfa aphid</td>
<td></td>
</tr>
<tr>
<td>chinch bug</td>
<td></td>
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<tr>
<td>cowpea aphid</td>
<td></td>
</tr>
<tr>
<td>crickets</td>
<td></td>
</tr>
<tr>
<td>cutworms</td>
<td></td>
</tr>
<tr>
<td>Egyptian alfalfa weevil larvae and adults (1)</td>
<td></td>
</tr>
<tr>
<td>greenbugs</td>
<td></td>
</tr>
<tr>
<td>June beetle grubs</td>
<td></td>
</tr>
<tr>
<td>millet</td>
<td></td>
</tr>
<tr>
<td>(Bermuda grass stunt)</td>
<td></td>
</tr>
<tr>
<td>(clover)</td>
<td></td>
</tr>
<tr>
<td>(two-spotted)</td>
<td></td>
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<tr>
<td>(winter grain)</td>
<td></td>
</tr>
<tr>
<td>pea aphid</td>
<td></td>
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<tr>
<td>plant bugs</td>
<td></td>
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<tr>
<td>sod webworm</td>
<td></td>
</tr>
<tr>
<td>sowbugs</td>
<td></td>
</tr>
<tr>
<td>spittlebugs</td>
<td></td>
</tr>
<tr>
<td>spotted alfalfa aphid (suppression)</td>
<td></td>
</tr>
<tr>
<td>(not for use in California)</td>
<td></td>
</tr>
<tr>
<td>alfalfa webworm</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Numbers in parentheses (-) refer to Pest-Specific Use Directions.

### Specific Use Precautions:

- **Preharvest Interval:** Do not cut or graze treated alfalfa within 7 days after application of 1/2 pint of Lorsban Advanced per acre, within 14 days after application of 1 pint per acre, or within 21 days after application of rates above 1 pint per acre.
- **Do not make more than four applications of Lorsban Advanced or other product containing chlorpyrifos per season or apply any product containing chlorpyrifos more than once per alfalfa cutting.**
- **Maximum single application rate is 0.94 lb ai chlorpyrifos (2 pints of Lorsban Advanced) per acre.**
- **Do not make a second application of Lorsban Advanced or other product containing chlorpyrifos within 10 days of the first application.**

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- **Do not make a second application of Lorsban Advanced or other product containing chlorpyrifos within 10 days of the first application.**

### Apple Tree Trunk

Not for use in Mississippi

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days unless PPE required for early entry is worn.

Apply as a post-bloom application to the lower 4 feet of the apple tree trunk for borer control in states east of the Rockies only (except Mississippi). Mix with water and apply directly to trunk from a distance of no more than 4 feet using low volume hand gun or shielded spray equipment. Do not allow spray to contact foliage or fruit.
Specific Use Precautions:

- Do not tank mix Lorsban Advanced with other pesticides, surfactants, or fertilizer formulations unless prior use has shown the combination to be non-injurious to alfalfa under current conditions of use. Some phytotoxic symptoms may be observed on young, tender, rapidly growing alfalfa treated with Lorsban Advanced. Alfalfa will outgrow these symptoms and no yield loss should be expected.

- This product is highly toxic to bees exposed to direct treatment on alfalfa. Do not apply if nearby bees are clustered outside of hives and bees are foraging in the treated area. Protective information may be obtained from your Agricultural Extension Service.

- To avoid contamination of irrigation tail waters, do not flood irrigate within 24 hours following an application of Lorsban Advanced.
Worker Protection Standard
Worker Protection Standard

- In effect as of January 2, 2017
- Implemented to meet US EPA Worker Protection Standard
Implementation

- January 2017: First round of changes
- January 2018: Second round of changes pertaining to new training requirements
- Merced County CE Classes: cover new regulations/updates
Application Exclusion Zone (AEZ)

- When pesticides are used for commercial/research production ag.
- The horizontal area surrounding the application equipment that must be free of all untrained people
  - 100ft: aerial, air blast, fine spray
  - 25ft: sprayed from greater than 12in from soil with medium spray
Handler and Fieldworker Training

- Location of training must be reasonably free from distraction
- Trainer must be present throughout training
- Training record must also include
  - Employee’s printed name
  - Titles and sources of training materials
  - Employer’s name
  - Trainer’s name and qualifications (license/certificate)
Fieldworker Training

- Train fieldworkers every 12 months, before beginning work in treated fields
- Employer must keep training records for two years
Field Postings

- Required by pesticide product labeling
- Required if restricted entry interval is greater than 48 hours
- Required on each border with a worker housing area within 100 feet
**Vulcan**

For control of listed insects infesting certain field, fruit, nut, and vegetable crops.

**ACTIVE INGREDIENT:**

Chlorpyrifos 0.03% or 0.05% (3,5,6-trichloro-2-pyridyl)phosphate (30.50%)

**OTHER INGREDIENTS:**

60.50%

**TOTAL:**

100.00%

*Contains petroleum distillates.

EPA Reg. No. 66222-233  EPA Est. No. 37429-GA-091"  37429-GA-002"

Letter(s) in lot number correspond(s) to superscript in EPA Est. No.

**KEEP OUT OF REACH OF CHILDREN CAUTION/PRECAUCIÓN**

Si usted no entiende esta etiqueta, busque a alguien que se lo explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

**VOXEN FORMULATIONS**

Vulcan is an emulsifiable concentrate (EC) miticide/insecticide formulated as part of the Voxen family of products.

For First Aid, Precautionary Statements, and Directions for Use, see inside of this booklet.

How can we help? 1-866-406-6262

Net Contents: 2.5 gallons

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**AGRICULTURAL USE REQUIREMENTS**

Use this product 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 intervals. 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:

- 4 days for fruit trees
- 5 days for citrus
- 3 days for cauliflower
- 24 hours for all other crops not listed above

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 over short sleeved shirt and shirt pants
- Chemical resistant gloves made out of any waterproof material
- Chemical resistant footwear plus socks
- Chemical Resistant headgear for over head exposures.

Certified crop advisors or persons entering under their direct supervision under certain circumstances may be exempt from the early reentry requirement pursuant to 40 CFR Part 170.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.
Decontamination Facilities - Handlers

- Water, soap, single use towels, one set of coveralls
- Must be located at the mix/load site and within ¼ mile from other handlers
- Three gallons of water per handler
- Employer must inform employee location of decontamination site before application
- **NO** hand sanitizer gels/liquids or wet towelettes
Decontamination Facilities- Handlers Cont’d

- One pint of eye wash, if protective eyewear is required by pesticide labeling
- Additional eye wash system requirements at mix/load sites
  - A system that delivers gently running water
    - 0.4 gallons/minute for 15 minutes, OR
    - Six gallons of water in containers that can provide a gentle-eye flush for 15 minutes
Decontamination Facilities- Fieldworkers

- Water, soap, single use towels
- Must be located within ¼ mile from fieldworkers
- One gallon of water per fieldworker
  - or three gallons per early entry worker
- Employer must inform employee location of decontamination site before application
- **NO** hand sanitizer gels/liquids or wet towelettes
Minimum Age Requirements

- Minimum age for handlers and early entry workers is 18
Hazard Communication

- For handlers and fieldworkers
- Pesticide Safety Information Series (PSIS) A-8 and A-9 must be posted at
  - all permanent decontamination facilities
  - Decontamination facilities servicing 11 or more employees
Application Specific Information

- Handlers and fieldworkers
- Start and end time
- Crop treated and site ID
- Safety Data Sheets (SDS)
- Employer must retain records for two years
Early Entry Employees

- No hand labor activities allowed unless proper PPE
- May enter if there will be no contact with treated soil, water, air, equipment, or plants
- 3 gallons of water per employee
The employer shall provide the following information to medical personnel treating an employee for a suspected pesticide exposure in the production of an agricultural commodity:

- (1) Copies of the applicable Safety Data Sheet(s) and the product name(s), U.S. EPA registration number(s) and active ingredient(s) for each pesticide product to which the person may have been exposed.
- (2) The circumstances of application or use of the pesticide.
- (3) The circumstances that could have resulted in exposure to the pesticide.
Safety of Employed Persons

- PCA employee exemptions removed
- Pest Control Advisors and foresters must comply with
  - Emergency medical care posting
  - Decontamination facilities
  - PPE requirements
- For their employees
Enclosed Cab Definition

- A chemical resistant barrier that completely surrounds the occupants of the cab and prevents dermal contact with pesticides being applied outside of the cab
Exemptions for Applying in an Enclosed Cab

- Requires handlers in enclosed cabs to wear the label-specified respiratory protection except when the only label-specified respiratory protection is a filtering face piece respirator (NIOSH approval number prefix TC–84A) or dust/mist filtering respirator.
<table>
<thead>
<tr>
<th>Description</th>
<th>Date noticed</th>
<th>Comment period</th>
<th>Status &amp; notes</th>
<th>Effective date</th>
</tr>
</thead>
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<tr>
<td>Section 100 - Nonsubstantive Change School Site and Child Day Care Pesticide Use Report by a Business Form</td>
<td>11/18/15</td>
<td>11/18/16 – 1/4/17</td>
<td>Filed with Secretary of State 1/5/17</td>
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<tr>
<td>DPR 16-005 - Copper-Based Antifouling Paint and Coating Products</td>
<td>9/30/16</td>
<td>9/30/16 - 12/9/16 Comment period extended and additional hearing &quot;15-day&quot; comment period 3/20/17 – 4/4/17</td>
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<tr>
<td>DPR 16-004 - Pesticide Use Near Schoolsites</td>
<td>7/1/16</td>
<td>7/1/16 – 8/15/16</td>
<td>Notice of Decision Not to Proceed</td>
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<td>DPR 16-002 - Sales of Agricultural and Restricted use Pesticides</td>
<td>5/17/16</td>
<td>5/17/16 – 8/1/16</td>
<td>Filed with Secretary of State 10/12/16</td>
<td>1/1/17</td>
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<tr>
<td>DPR 16-001 - Worker Protection Standard</td>
<td>4/22/16</td>
<td>4/22/16 – 6/6/16</td>
<td>Filed with Secretary of State 10/17/16</td>
<td>1/2/17</td>
</tr>
</tbody>
</table>

Regulations that went into effect more than one year ago, see Archives.
Compliance Assistance Inspections

- Ask us about Compliance assistance inspections
- Get inspected before you do something wrong
- No fear of violation - We are there to educate you and help you with regulations
- We will work with you and offer helpful suggestions for any problems you may have
- Protect yourself from worker safety issues and litigation
- Call us – before we call you
Visit Our Website

http://www.co.merced.ca.us/index.aspx?nid=58