

# FireLine™

45 WP

Fungicide/Bactericide

OXTETRACYCLINE	GROUP	41	FUNGICIDE
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**For control or suppression of:**

- Fire Blight for apples and pears
- Bacterial Spot for peaches and nectarines
- Huanglongbing (“HLB”, “citrus greening”, “greening”) for citrus Crop Group 10-10
- Citrus canker for citrus Crop Group 10-10

**Active Ingredient:**

Oxytetracycline Hydrochloride*.....	48.80%
Related Compounds.....	0.45%
<b>Other Ingredients</b> .....	<u>50.75%</u>
<b>TOTAL</b> .....	<b>100.00%</b>

\*Equivalent to 45% oxytetracycline

## KEEP OUT OF REACH OF CHILDREN WARNING

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

**See Side/Back Panel for Additional Precautionary Statements and Directions for Use**



**AgroSource, Inc.**  
P.O. Box 3091  
Tequesta, Florida 33469

REV80990-6  
(1.875LB-FL45TL08202019)

**EPA Reg. No. 80990-6**  
**EPA Est. No. 65387-AR-2**

**NOTICE:** Read the entire Directions for Use and Conditions for Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product within 90 days, unopened and undamaged, and the purchase price will be refunded.

**NET CONTENTS: 1.875 Pounds (30 oz.)**

<b>FIRST AID</b>	
<b>If in Eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on Skin or Clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If Swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have the person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything to an unconscious person.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact InfoTrac at 1-800-535-5053 for emergency medical treatment information.	

### PRECAUTIONARY STATEMENTS

#### Hazards to Humans & Domestic Animals

**WARNING:** Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through skin. Do not get in eyes, or on clothing. Wear protective eyewear (goggles, safety glasses, or face shield). Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before re-use. This material is not to be used for medical, veterinary or human purposes.

#### Personal Protective Equipment (PPE)

All applicators and other handlers must wear a minimum of:

- Coveralls over short sleeved shirt and short pants
- Protective eyewear (goggles, safety glasses, or face shield)
- Shoes and socks
- Chemical resistant gloves
- NIOSH-approved particulate filtering facepiece respirator with any N, R or P filter (TC-84A); OR an elastomeric NIOSH-approved particulate respirator with any N, R or P filter (TC-84A); OR a NIOSH-approved powered air purifying respirator with an HE filter (TC-21C). Higher level respirators that are NIOSH-approved for particulates that contain oil may also be used.

Applicators must also wear chemical-resistant headgear ensuring full coverage of the neck.

Applicators do not have to wear the protective eyewear, chemical-resistant gloves, chemical-resistant headgear, or a respirator when using closed cab systems that meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(e)].

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.607(d) and (e)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### 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

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

### 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.

Attention: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

### 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 apply to uses 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 12 hours.**

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, wear:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks
- Protective eyewear

This product contains the antibiotic oxytetracycline. To reduce the development of drug-resistant bacteria and maintain the effectiveness of this and other fungicide/bactericide products, this product should be used only to treat or prevent infections that are proven or strongly suspected to be caused by bacteria or fungi.

Resistance Management Statements: **FireLine™ 45 WP** contains a Group 41 (antibiotic/fungicide/bactericide). Bacterial strains/fungal isolates with acquired resistance to Group 41 may eventually dominate the bacterial/fungal population if Group 41 products are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by **Fireline™ 45 WP** or other Group 41 products.

To delay antibiotic/fungicide/bactericide resistance, take one or more of the following steps:

- Use only the specified and full strength application rates.
- The mode of action for oxytetracycline is the inhibition of protein synthesis. This product should be used to treat or prevent infections that are proven or strongly suspected to be caused by the indicated target bacteria. To reduce likelihood of bacteria developing resistance to oxytetracycline, follow the crop specific resistance management and use direction information present on this labeling. Use of this product should conform to resistance management practices/strategies established for the crop and use area (for example the use of IPM, disease forecasting models, resistance crop varieties, etc.) Consult your local extension/crop consultant or State agricultural authority if reduced efficacy is suspected.
- Adopt an integrated disease management program that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time applications.
- Avoid the consecutive use of **Fireline™ 45 WP** or other target site of action Group 41 products that have a similar target site of action, on the same pathogens.
- Use tank-mixtures or premixes with products from different target site of action Groups as long as the involved products are all registered for the same use and are both effective at the tank mix or prepack rate on the pathogen(s) of concern. Do not use any product that has a prohibition on tank mixing and follow the more restrictive use directions.
- When feasible, **Fireline™ 45 WP** should be alternated with a comparable bactericide with a different mode of action.
- Base use on a comprehensive IPM program.
- Monitor treated bacterial/fungal populations for loss of field efficacy.
- Contact your local extension specialist, certified crop advisors, and/or manufacturer for fungicide/bactericide resistance management and/or IPM recommendations for specific crops and resistant pathogens.
- For further information or to report suspected resistance contact AgroSource, Inc. at 908-931-9001.

### Application Restrictions-All Uses:

- Not to be used for medical, veterinary or human purposes.
- Not for residential use.
- Do not apply this product through any type of irrigation system, including chemigation.
- Do not apply this product by aerial application.
- Animal grazing in treated areas is prohibited. The public must be notified by posting restriction signs along the perimeter of the treatment area.
- Use only the specified and full-strength application rates.
- Do not apply oxytetracycline in orchards in which the soil has been fertilized with animal waste/manure or human biosolids.
- Do not apply more than two consecutive applications before alternating with another fungicide/bactericide of a different mode of action.
- Spray Drift Precaution - ALL uses - to help reduce off-target drift, direct spray into the canopy, and turn off outward pointing nozzles at row ends and when spraying outer rows.

Crop Use Directions				
Crop	Disease (Pathogen)	Product Application Rate	Use Directions	Specific Use Restrictions
Apples	Fire Blight ( <i>Erwinia amylovora</i> )	9 oz. per acre (4.39 oz. active ingredient, ai, per acre, equivalent to 4.05 oz. oxytetracycline free base)	Begin applications at the start of bloom. Repeat spray applications at 3 to 6-day intervals until the end of bloom. One additional post bloom application permitted.  Apply product in sufficient water volume to achieve adequate coverage.	Maximum number of applications per year: 6  Do not apply within 60 days of harvest.  Maximum <u>annual</u> amount that may be applied <u>per acre</u> : 3.38 lbs. (54 oz.) of product per acre (1.65 lbs. active ingredient per acre, equivalent to 1.52 lbs. oxytetracycline free base).  Use only the full strength application rate  Follow Application Restrictions-All Uses.
Pears	Fire Blight ( <i>Erwinia amylovora</i> )	6 oz. per acre (2.93 oz. active ingredient, ai, per acre, equivalent to 2.70 oz. oxytetracycline free base)	Begin applications at 10% bloom. Repeat applications at 4 to 6-day intervals.  Apply product in sufficient water volume to achieve adequate coverage.	Maximum number of applications per year: 10  Do not apply within 60 days of harvest.  Maximum <u>annual</u> amount that may be applied <u>per acre</u> : 3.75 lbs. (60 oz.) of product per acre (1.83 lbs. active ingredient per acre, equivalent to 1.69 lbs. oxytetracycline free base).  Use only the full strength application rate  Follow Application Restrictions-All Uses.
Peaches & Nectarines	Bacterial Spot ( <i>Xanthomonas pruni</i> )	6.75 oz. per acre (3.29 oz. active ingredient, ai, per acre, equivalent to 3.04 oz. oxytetracycline free base)	Begin applications at "shuck split". When disease pressure is high, spray at 5-7-day intervals. Consider alternating or tank mixing with copper based products. Note: certain <u>liquid</u> copper formulations may be <u>incompatible</u> with Fireline™ 45 WP.  If disease pressure is low, spray interval may be lengthened accordingly.  Apply product in sufficient water volume to achieve adequate coverage.	Maximum number of applications per year: 9  Do not apply within 21 days of harvest.  Maximum <u>annual</u> amount that may be applied <u>per acre</u> : 3.8 lbs. (60.75 oz.) of product per acre (1.85 lbs. active ingredient per acre, equivalent to 1.71 lbs. oxytetracycline free base).  Use only the full strength application rate  Follow Application Restrictions-All Uses.

Crop Use Directions				
Crop	Disease (Pathogen)	Product Application Rate	Use Directions	Specific Use Restrictions
Citrus Fruit (Crop Group 10-10) Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti Lime; tangelo; tangerine (mandarin); tangor; trifoliolate orange; unqi fruit; cultivars, varieties, and/or hybrids of these	Huanglong-bing also known as "HLB", "Citrus Greening", or "Greening" disease (e.g. <i>Candidatus Liberibacter asiaticus</i> also known as "CLas" or "Las")	9 oz. per acre (4.39 oz. active ingredient, ai, per acre, equivalent to 4.05 oz. oxytetracycline free base)	Apply as a foliar spray using sufficient carrier volume to ensure complete coverage. Use with spray adjuvant, spreader sticking agent, or horticultural oil.  Make a <b>first</b> application at initiation of spring flush to suppress HLB titer and disease symptoms.  Make a <b>second</b> application mid-summer (not less than 21 days after first application).  Make a <b>third</b> application in late summer to reduce the incidence of HLB-induced fruit drop and to further suppress HLB titer and disease symptoms (not less than 21 days after second application).	Maximum number of applications per year: 3  Minimum retreatment interval: 21 days.  Do not apply within 40 days of harvest.  Maximum <u>annual</u> amount of product that may be applied <u>per acre</u> : 1.69 lbs. (0.82 lbs. active ingredient per acre, equivalent to 0.76 lbs. oxytetracycline free base)  Use only the full strength application rate  Follow Application Restrictions-All Uses.
Citrus Fruit (Crop Group 10-10) Australian desert lime; Australian finger-lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids; grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; mount white lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; satsuma mandarin; sweet lime; tachibana orange; Tahiti Lime; tangelo; tangerine (mandarin); tangor; trifoliolate orange; unqi fruit; cultivars, varieties, and/or hybrids of these	Citrus Canker ( <i>Xanthomonas citri</i> pv. <i>citri</i> )	9 oz. per acre (4.39 oz. active ingredient, ai, per acre, equivalent to 4.05 oz. oxytetracycline free base)	Apply as a foliar spray using sufficient carrier volume to ensure complete coverage. Use with spray adjuvant, spreader sticking agent, or horticultural oil.  Make <b>first</b> application when spring flush is approximately 75% expanded to protect new growth from canker infection.  Make a <b>second</b> application in summer when weather conditions warrant during periods of high canker risk (not less than 21 days after first application).  Make a <b>third</b> application in late summer to reduce the incidence of canker-induced fruit drop (not less than 21 days after second application).	Maximum number of applications per year: 3  Minimum retreatment interval: 21 days.  Do not apply within 40 days of harvest.  Maximum <u>annual</u> amount of product that may be applied <u>per acre</u> : 1.69 lbs. (0.82 lbs. active ingredient per acre, equivalent to 0.76 lbs. oxytetracycline free base)  Use only the full strength application rate  Follow Application Restrictions-All Uses.

**MIXING:** To avoid possible pesticide contamination, use only clean metal or plastic containers in preparing all solutions.

Additional information regarding use of **Fireline™ 45 WP** may be obtained from your local Agricultural Extension Agent or State Experimental Station.

Use of **Fireline™ 45 WP** may cause phytotoxicity to the fruit and/or foliage of sensitive varieties of pears, apples, peaches and nectarines and citrus (Crop Group 10-10).

## STORAGE AND DISPOSAL

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

**Storage:** Keep tightly closed and sealed. Product is moisture, temperature and light sensitive. Product is hygroscopic so protect from moisture. Store in a cool (<77°F, 25°C), dry place away from heat and open flames with minimum exposure to the atmosphere. Avoid extremes in temperature.

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

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

## CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently 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, resistant strains or other influencing factors in the use of the product, which are beyond the control of AGROSOURCE, INC. or Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold AGROSOURCE, INC. and Seller harmless for any claims relating to such factors. AGROSOURCE, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions.

This warranty does not extend to the use of the product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or AGROSOURCE, INC., and Buyer and User assume the risk of any such use. AGROSOURCE, INC. MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE. In no event shall AGROSOURCE, INC. or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product.

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**FireLine™ 45 WP** Alternate Brand Names (ABN)

Radius™ 45 WP