

5481-503

10/10/2008

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Ms. Julie Tran
Amvac Chemical Corporation
4695 MacArthur Court, Suite 1250
Newport Beach, CA 92660

OCT 10 2008

Dear Ms. Tran:

Subject: Amendment – Response to Feb 21, 2008 letter implementing spray drift language and
Permethrin RED risk mitigation labeling
Ambush 25W Insecticide
EPA Reg. No. 5481-503
Your submission dated July 30, 2008

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) section 3(c)(7)(a), is acceptable provided that you:

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. Under the heading Personal Protective Equipment (PPE) , in the bulleted list under “Mixers, loaders, applicators, and other handlers must wear” add as the last bullet:
 - Chemical-resistant apron for mixers/loaders, persons cleaning equipment, and persons exposed to the concentrate.
 - b. Add an outline box enclosing the heading User Safety Requirements and the associated two bullets. Also reverse the order of the two bulleted items, i.e., so that the item “Follow manufacturer’s instructions ...” appears before the item “Discard clothing...”.
 - c. Relocate the paragraph beginning “Do not apply this pesticide in a way...etc.” and ending “...State or Tribe, consult the agency responsible for pesticide regulation” from beneath “It is a violation of Federal law...etc” to appear directly above the Agricultural Use Requirements box.

- d. Directly under the heading DIRECTIONS FOR USE add **“RESTRICTED USE PESTICIDE”** in bold print.
- e. Under the heading “Buffer Zones”, correct the website URL (address) for guidance to read as follows: www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf . Also, qualify the site “ponds” to read “natural ponds” and qualify “streams” to read “permanent streams” under the subheading “Buffer Zone for Ground Application”.
- f. In the REMARKS for each crop giving the maximum rate per application and the seasonal maximum application rate, give both the ounces of formulated product and the pounds active per acre for both entries. For example, revise the entries to read “Do not apply more than X oz. of product (Y lbs. ai)/A per application or more than X oz. of product (Y lbs. a.i.) per acre per season”. Substitute X and Y with the appropriate value for each crop.
- g. For many crops, although the “LBS AI/Acre” Rate was revised the “Oz/Acre” Rate was not adjusted accordingly. For Broccoli, revise the “OZ/Acre” Rate entry to read “(3.2-12.8)”
- h. For Chinese Broccoli, revise the “OZ/Acre” Rate entry to read“(3.2-12.8)”
- i. For Eggplant, revise the first “OZ/Acre” Rate entry to read “9.6” rather than “12.8”.
- j. For Field Corn/Popcorn/Field Corn Grown for Seed (Pre-emergent Use), revise the “OZ/Acre” Rate entry to read “(6.4-9.6)”.
- k. For Field Corn/Popcorn/Field Corn Grown for Seed (Foliar Use), revise the “OZ/Acre” Rate entry to read “(6.4-9.6)”.
- l. For Apples, revise the “OZ/Acre” Rate entry to read “(6.4-16)”.
- m. For FILBERTS, revise the RATE column entry to read “0.2 – 0.25 (12.8 – 16)”. Also, in the REMARKS section replace “Do not apply more than 1.6 lbs. a.i per acre per season” with “Do not apply more than 16 oz of product (0.25 lbs. a.i.)/A per application or more than 48 oz. of product (0.75 lbs. a. i.) per acre per season. Please allow a minimum of 10 days between treatments.”.
- n. For Papaya (Florida Only), revise the “OZ/Acre” Rate entry to read “(9.6)”.
- o. For Peaches, revise the “OZ/Acre” Rate entry to read “(6.4 - 16)”.
- p. For Pears (Dormant) revise the Rate to read “0.2 – 0.25 (12.8 - 16)”.
- q. For Pears (Pre-bloom), revise the “OZ/Acre” Rate entry to read “(12.8 - 16)”.

- r. For Pistachios, revise the "OZ/Acre" Rate entry to read "(12.8 – 19.2)".
- s. For Walnuts, revise the "OZ/Acre" Rate entry to read "(12.8 - 16)".
- t. For MUSHROOMS, in the REMARKS add as the second sentence "Use of high pressure hand wand prohibited in mushroom houses." . Also, add as the last sentence of the REMARKS "Note: Spoons used for measuring pesticides must not be used for food purposes after use in measuring pesticides."
- u. For ROSES (Greenhouse), indicate the type of application equipment (such as pump spray or power spray) and whether ULV and/or mist or fogging equipment is permitted or prohibited, since this could affect the PPE required.
- v. In the Rate Conversion chart, delete the entries "0.35" and "0.40" Pounds Active and the associated column entries since those rates exceed the highest single application rate for agricultural crops presented in Attachment 2 of the Agency's February 21, 2008 letter.
- w. For the Storage and Disposal section, include the label revisions specified by PR Notice 2007-4, which is available at www.epa.gov/opppmsd1/PR_Notices/pr2007-4.pdf .
- x. In the third paragraph of the Limited Warranty and Disclaimer, add "To the extent permitted by law" before "Buyer's exclusive remedy..."

A stamped copy of the label is enclosed for your records. Please submit three copies of the amended labeling bearing the above revisions before you release the amended label for shipment. Please note that acceptance of this amendment does not constitute reregistration of the subject product.

Sincerely,

Dana R Pillett

for Richard Gebken.
Product Manager 13
Insecticide Branch
Registration Division (7505P)

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RESTRICTED USE PESTICIDE

Due to Toxicity to Fish and Aquatic Organisms

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

AMBUSH® 25W INSECTICIDE
Water Soluble Pack

ACTIVE INGREDIENT:

Permethrin

(3-Phenoxyphenyl)methyl(±)-*cis,trans*-3-(2,2-dichloroethenyl)-

2,2-dimethylcyclopropanecarboxylate*25.0%

INERT INGREDIENTS:75.0%

TOTAL100.0%

**Cis/trans* ratio: Min. 35% (±) *cis* and max. 65% (±) *trans*.

KEEP OUT OF REACH OF CHILDREN

WARNING - AVISO

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.)

FIRST AID

If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for further treatment advice.

EMERGENCY INFORMATION

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:

Transportation: CHEMTREC.....1-800-424-9300

Other: AMVAC.....1-323-264-3910

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE.

EPA Reg. No. 5481-503
EPA Est. No. 37429-GA-2

Net Weight:
As Marked on Container



4100 E. Washington Blvd.
Los Angeles, CA 90023 U.S.A
1-323-264-3910 • www.amvac-chemical.com

ACCEPTED
with COMMENTS
In EPA Letter Dated:

OCT 10 2008

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.
5481-503

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Causes substantial but temporary eye injury. Wear protective eyewear such as goggles, face shield or safety glasses. Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing dust or spray mist. Do not get in eyes, skin, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are Barrier Laminate, Butyl Rubber, Nitrile Rubber and Viton. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves for all handlers except for applicators using motorized ground equipment, pilots and flaggers

See engineering controls for additional requirements.

USER SAFETY REQUIREMENTS

- Discard clothing and other absorbent materials that have been drenched (except as required by directions for use) or heavily contaminated with this product's concentrate. Do not reuse them.
- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

Water-soluble packets when used correctly qualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders using water-soluble packets must:

- Wear the personal protective equipment required in the PPE section of this labeling for mixers and loaders, and
- Be provided and must have immediately available for use in an emergency, such as a broken package, spill or equipment breakdown chemical resistant footwear and dust/mist respirators.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean water mark. Do not contaminate water when disposing of equipment wash waters. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas.

Under some conditions, it may also have a potential for transport into surface water in runoff (primarily adsorbed to suspended soil particles), for several months or more after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, and areas overlying extremely shallow

groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are actively visiting the treatment area.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing 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.

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.

Do not apply this product through any type of irrigation system.

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 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 12 hours.

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
- Chemical-resistant gloves made of any waterproof material.
- Shoes plus socks

GENERAL PRECAUTIONS AND RESTRICTIONS

BUFFER ZONES

Vegetative Buffer Strip

Construct and maintain a minimum 10-foot wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing permethrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers:

Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21 pp.

<http://www.in.csusda/v/technical/agronom/newconbuf.pdf>

Buffer Zone for Ground Application (ground boom, overhead chemigation, or air blast)

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

SPRAY DRIFT REQUIREMENTS

Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition.

Do not apply when the wind velocity exceeds 15 mph.

Temperature Inversion

Do not make aerial or ground applications into temperature inversions.

Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

Droplet Size

Use only Medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

Additional Requirements for Ground Applications

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For air blast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

Additional Requirements for Aerial Applications

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

Read label to determine rate of AMBUSH 25W insecticide to be applied. Consult the Rate Conversion Chart to determine number of acres a 1.0 lb. or 2.0 lb. water-soluble pack will treat at the desired rate. Based on number of acres to be sprayed per tank load, drop in the required number of unopened packs.

GENERAL INFORMATION

Apply AMBUSH 25W as shown in "Directions for Application". Use sufficient water to obtain full coverage of foliage. Timing and frequency of applications should be based upon insect populations reaching economic thresholds.

The higher rates may be required under conditions of heavy infestation. Do not apply more than 2.0 lbs. active ingredient (a.i.) per acre per season. Crops in this label may be planted immediately after last treatment. Do not plant other crops within 60 days after last application. Any other crop may be planted if it is not harvested or grazed.

Resistance: Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your Local or State Agricultural Authorities for details.

If resistance to this product develops in your area, this product or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

MIXING INSTRUCTIONS

AMBUSH 25W insecticide is intended for dilution with water for spray application. Prepare no more spray mixture than is needed for the immediate operation. Thoroughly clean spray equipment before using this product. Agitate thoroughly before and during application. Good bypass agitation is sufficient to keep AMBUSH 25W insecticide thoroughly mixed. Do not let spray mixture stand overnight in the spray tank. Rinse spray tank at the end of the day.

Fill spray tank 1/4 to 1/2 full of water. With the agitator running, drop the required number of unopened soluble packs of AMBUSH 25W insecticide into the tank. Continue agitation while adding the remainder of the water. Do not use this product with oil.

DIRECTIONS FOR APPLICATION

CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
COLE CROPS - Brassica Leafy Vegetables			
Broccoli	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid ^a	0.05-0.2 (3.2-6.4)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.2 lb. a.i./A per application or more than 0.8 lbs. a.i. per acre per season. Do not apply within 1 day of harvest. Please allow a minimum of 5 days between treatments.
Brussels Sprouts	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid ^a	0.05-0.1 (3.2-6.4)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.1 lb. a.i./A per application or more than 0.4 lbs. a.i. per acre per season. Do not apply within 1 day of harvest. Please allow a minimum of 5 days between treatments.
Cabbage	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid ^a	0.05-0.2 (3.2-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.2 lb. a.i./A per application or more than 0.4 (0.8 in HI) lb. a.i. per acre per season. Do not apply within 1 day of harvest. Please allow a minimum of 5 days between treatments.
Cauliflower	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid ^a	0.05-0.1 (3.2-6.4)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.1 lb. a.i./A per application or more than 0.4 (0.6 in HI) lbs. a.i. per acre per season. Do not apply within 1 day of harvest. Please allow a minimum of 5 days between treatments.

DIRECTIONS FOR APPLICATION

CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
Chinese Broccoli ^b (gai lon, white flowering)	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid ^a	0.05-0.2 (3.2-6.4)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.2 lb. a.i./A or more than 0.8 lbs. a.i. per acre per season. Do not apply within 1 day of harvest. Please allow a minimum of 5 days between treatments.
Chinese Cabbage (Tight-heading varieties only)	Cabbage Looper Imported Cabbageworm Diamondback Moth Cabbage Aphid ^a	0.05-0.2 (3.2-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.2 lb. a.i./A per application or more than 0.4 (0.8 in HI) lb. a.i. per acre per season. Do not apply within 1 day of harvest. Please allow a minimum of 5 days between treatments.
CUCURBIT VEGETABLES			
Cucurbit Vegetables ⁺	Leafminers and Squash Bugs Cabbage Looper Cucumber Beetle (adults) Cutworms Melon Worm Pickleworm Plant Bugs (including Lygus and Stink Bugs) Rindworms and Squash Vine Borer	0.2 (12.8) 0.1-0.2 (6.4-12.8)	Apply by air or ground equipment. Apply a minimum of 4 gallons of finished spray per acre by air or 20 gallons of finished spray per acre with ground equipment. Do not apply more than 0.2 lbs. a.i./A per application or more than 1.2 lbs. a.i. per acre per season. AMBUSH 25W may be applied up to harvest. Please allow a minimum of 7 days between treatments. Cantaloupe Only – Do not apply more than 0.1 lb. a.i./A per application or more than 0.8 (1.2 in HI) lb. a.i./A per season.
FRUITING VEGETABLES			
Eggplant	Colorado Potato Beetle Vegetable Leafminer Cabbage Looper Flea Beetle	0.15 (12.8) 0.1-0.2 (6.4-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain uniform coverage. Do not apply more than 0.15 lb. a.i./A per application or more than 0.6 (1.0 in HI) lbs. a.i. per acre per season. Do not apply within 3 days of harvest. Please allow a minimum of 7 days between treatments.
Peppers (Bell)	Vegetable Leafminer Cabbage Looper Flea Beetle Pepper Weevil European Corn Borer	0.1-0.2 (6.4-12.8) 0.2 (12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain uniform coverage. Do not apply more than 0.2 lb. a.i./A per application or more than 0.8 lbs. a.i. per acre per season. Do not apply within 3 days of harvest. Please allow a minimum of 5 days between treatments.

DIRECTIONS FOR APPLICATION

CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
Tomatoes	Tomato Fruitworm Cabbage Looper Tomato Pinworm Vegetable Leafminer Beet Armyworm Southern Armyworm Colorado Potato Beetle Granulate Cutworm Hornworm	0.05-0.2 (3.2-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain uniform coverage. Do not apply more than 0.2 lb. a.i./A per application or more than 0.6 (0.8 in HI) lbs. a.i. per acre per season. Can be applied up to the day of harvest. Do not apply as a band. Do not use on tomato varieties in which the mature tomatoes will be less than 1 inch in diameter (such as cherry tomatoes). Please allow a minimum of 7 days between treatments.
LEAFY VEGETABLES			
Leafy Vegetables* (except Brassica)	Vegetable Leafminer Cabbage Looper Cutworm Complex Fall Armyworm Beet Armyworm Corn Earworm Green Cloverworm Leafhoppers European Corn Borer	0.1-0.2 (6.4-12.8)	<p>Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.2 lb. a.i./A per application or more than 1.0 (1.2 in HI) lbs. a.i. per acre per season. Can be applied up to 1 day of harvest. Please allow a minimum of 7 days between treatments.</p> <p>Lettuce only – Do not apply more than 0.2 lb. a.i./A per application and more than 0.8 (1.2 in HI) lb. a.i./A per season. Please allow a minimum of 7 days between treatments.</p> <p>Spinach only - Do not apply more than 0.2 lb. a.i./A per application or more than 0.6 lb. a.i. per acre per season. Please allow a minimum of 3 days between treatments.</p>

DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
ROOT, TUBER AND BULB VEGETABLES			
Onions (Dry Bulb and Garlic)	Onion Thrips Armyworms	0.15-0.3 (9.6-19.2)	Apply by air or ground equipment. Apply in a minimum of 20 gallons of water per acre with ground equipment or in a minimum of 6 gallons per acre by air as foliar spray. Begin applications when pests appear. Use the higher label rates as onion thrips population increases and avoid rescue situations. Do not apply more than 0.3 lb. a.i./A per application or more than 1.0 lbs. a.i. per acre per season. Do not apply within 1 day of harvest. Please allow a minimum of 7 days between treatments. Garlic only – Do not apply more than 0.2 lb. a.i./A per application or more than 0.8 lb. a.i./A per season. Please allow a minimum of 10 days between treatments.
	Cutworms Leafminers Onion Maggots (adult) Stink bugs	0.1-0.3 (6.4-19.2)	
Potatoes	Colorado Potato Beetle Potato Leafhopper Aster Leafhopper Potato Flea Beetle Potato Aphid Potato Tuberworm Potato Psyllid Cabbage Looper	0.05-0.2 (3.2-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.2 lb. a.i./A per application or more than 0.8 lbs. a.i. per acre per season. Can be applied up to 14 days prior to harvest. Please allow a minimum of 10 days between treatments.
CEREAL GRAINS			
Field Corn/Popcorn/ Field Corn Grown for Seed (Pre-emergent Use)**	Armyworm Cutworms	0.1-0.15 (6.4-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons water per acre. Do not apply more than 0.15 lb. a.i./A per application or more than 0.45 lb. a.i./A per season. Apply in the time period from 5 days prior to planting up to emergence of the crop. Please allow a minimum of 7 days between treatments.
Field Corn/Popcorn/ Field Corn Grown for Seed (Foliar Use)**	Cutworms European Corn Borer Armyworm Southwestern Corn Borer Flea Beetle Corn Earworm*** Corn Rootworm Beetle*** Tobacco Budworm*** Stalk Borer	0.1- 0.15 (6.4-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Do not apply more than 0.15 lb. a.i./A per application or more than 0.45 lbs. a.i. per acre per season. Please allow a minimum of 7 days between treatments. Do not apply within 30 days of harvest of grain or fodder (stover). Forage may be harvested on the day of application. When treating for stalk borer, AMBUSH 25W must be applied when or shortly before the stalk borer larvae are moving into the corn from surrounding weeds and grasses. Mowing or burndown herbicide is suggested to initiate movement.**
Sweet Corn	Corn Earworm European Corn Borer Fall Armyworm Corn Rootworm Adults Cutworms Aster Leafhopper Flea Beetle ^b	0.1-0.2 (6.4-12.8)	Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Do not apply more than 0.2 lb. a.i./A per application or more than 0.8 lbs. a.i. per acre per season. Do not apply within 1 day of harvest of ears or forage or livestock grazing. Please allow a minimum of 3 days between treatments. AMBUSH 25W may be mixed with LANNATE® (methomyl) in accordance with label limitations and precautions. Label dosage rates should not be exceeded.
TREE CROPS			

DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
Apples	Apple Aphid Redbanded Leafroller Oblique banded Leafroller Plum Curculio White Apple Leafhopper Spotted Tentiform Leafminer Tarnished Plant Bug	0.1-0.25 (6.4-25.6)	Apply by ground equipment only. Apply in a minimum of 25 gallons of water per acre. Spray to wet all foliage. Do not apply after petal fall. Do not apply more than 0.25 lb. a.i./A per application or more than 0.5 lbs. per acre per season. Please allow a minimum of 10 days between treatments.
Avocados	Thrips Leafhoppers Mirid bugs Lepidopterous larvae	0.2 (12.8)	Apply by ground equipment only. Apply in a minimum of 25 gallons of water per acre. Spray to wet all foliage. Apply when insects appear. Do not apply more than 0.2 lb. a.i./A per application or more than 0.8 lb. a.i./A per season. Please allow a minimum of 7 days between treatments. Do not make more than 6 applications per season. Do not apply within 7 days of harvest. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock.
Cherries	Lesser Peachtree Borer Rose Chafer Green Fruitworm Redbanded Leafroller Plum Curculio Tarnished Plant Bug	0.1-0.2 (6.4-12.8)	Apply by ground equipment only. Apply in a minimum of 25 gallons of water per acre. Apply when insects appear. Do not apply more than 0.2 lb. a.i./A per application or more than 0.6 lb. a.i./A per season. In the East, do not exceed 6 applications per season, with no more than 4 applications after petal fall. In the West, do not apply more than 4 applications per season, with no more than 3 applications after petal fall. Please allow a minimum of 10 days between treatments. Do not apply within 3 days of harvest. Do not graze livestock in treated orchards. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock.
Filberts	Filbertworm Oblique Banded Leafroller	0.2-0.4 (12.8-25.6)	Apply by air or ground equipment. By air, apply in a minimum of 10 gallons of water per acre. By ground, apply in a minimum of 25 gallons of water per acre. Use sufficient water to obtain uniform coverage. Apply when insects appear. Do not apply more than 1.6 lbs. a.i. per acre per season. Do not apply within 14 days of harvest. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock.
Papaya (Florida only)	Fruit Fly	0.15 (6.4)	Apply by ground equipment only. Apply in a minimum of 25 gallons of water per acre. Spray to wet all foliage. Apply when insects appear. Do not apply more than 0.15 lb. a.i./A per application or more than 0.75 lb. a.i./A per season. Please allow a minimum of 10 days between treatments. Do not make more than 6 applications per season. Do not apply within 7 days of harvest. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock.

DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
Peaches	Peach Twig Borer Oriental Fruit Moth Green Fruitworm Lesser Peachtree Borer Plum Curculio Tarnished Plantbug Rose Chafer	0.1- 0.25 (6.4-19.2)	Apply by air or ground equipment. By air, apply in a minimum of 10 gallons of water per acre. By ground, apply in a minimum of 25 gallons of water per acre. Spray to wet all foliage. Can be applied up to 14 days before harvest. Do not apply more than 0.25 lb. a.i./A per application or more than .75 lbs. a.i. per acre per season. Please allow a minimum of 10 days between treatments. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock.
Pears (Dormant)	Pear Psylla	0.2-0.4 (12.8-25.6)	Apply by air or ground equipment. By air, apply in a minimum of 10 gallons of water per acre. By ground, apply in a minimum of 25 gallons of water per acre. Use sufficient water to obtain uniform coverage. Apply at a rate of 0.8 to 1.6 pints (0.2 to 0.4 lbs. a.i.) per acre. May be combined with 2 to 8 gallons of spray oil per acre. Apply during the dormant through delayed dormant growth periods only. Do not apply more than 0.65 lbs. a.i. per acre per season. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock. Please allow a minimum of 10 days between treatments.
Pears (Pre-bloom)	Pear Psylla Codling Moth Green Fruitworm	0.2-0.25 (12.8-25.6)	Apply by air or ground equipment. By air, apply in a minimum of 10 gallons of water per acre. By ground, apply in a minimum of 25 gallons of water per acre. Use sufficient water to obtain uniform coverage. Apply two pre-bloom sprays. Pre-bloom sprays can be applied from dormant through bud burst stages. Do not apply more than 0.25 lb. a.i./A per application or more than 0.65 lbs. a.i. per acre per season. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock. Please allow a minimum of 10 days between treatments.
Pistachios	Peach Twig Borer Naval Orangeworm Chinch Bug	0.2- 0.3 (12.8-25.6)	Apply by ground equipment only. Apply in a minimum of 25 gallons of water per acre. Use sufficient water to obtain full coverage of foliage. Do not apply more than 0.3 lb. a.i./A per application or more than 0.9 lbs. a.i. per acre per season. Do not apply after 10 percent hull split. Nuts may be harvested on the day of application. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock. Please allow a minimum of 10 days between treatments.
Walnuts	Navel Orangeworm Codling Moth Walnut Husk Fly	0.2- 0.25 (12.8-25.6)	Apply by air or ground equipment. By air, apply in a minimum of 10 gallons of water per acre. By ground, apply in a minimum of 25 gallons of water per acre. Use sufficient water to obtain uniform coverage. Apply when insects appear. Do not apply more than 0.25 lb. a.i./A per application or more than 0.75 lbs. a.i. per acre per season. Do not apply within 1 day of harvest. Do not graze livestock in treated areas. Do not feed cover crops from treated areas to livestock. Please allow a minimum of 10 days between treatments.

DIRECTIONS FOR APPLICATION

CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
OTHER CROPS			
Alfalfa, Alfalfa grown for seed	<p>Alfalfa Caterpillar Armyworms Cutworms Loopers Webworms Potato Leafhopper Blue Alfalfa Aphid^e Green Peach Aphid Pea Aphid^e Green Cloverworm Spotted Alfalfa Aphid Velvetbean Caterpillar</p> <p>Alfalfa Weevil^e Egyptian Alfalfa Weevil^e Cucumber Beetle Meadow Spittlebug Plant Bugs including Lygus spp.^e Stink Bugs</p>	<p>0.05-0.2 (3.2-12.8)</p> <p>0.1-0.2 (6.4-12.8)</p>	<p>Apply by air or ground equipment. Use higher recommended dosage for increased pest pressure or for increased residual pest control. Apply in a minimum of 2 gallons of finished spray per acre by aircraft or 10 gallons of finished spray per acre with ground equipment. Use higher gallonage, 5 to 10 gallons by air, or 20 by ground, finished spray per acre when foliage is dense and/or when pest populations are high. Do not apply more than 0.2 lbs. a.i. per cutting. When rates of 0.1 lb. a.i. per acre or less are used, application may be made on day of harvest. When rates greater than 0.1 lb. a.i. per acre are used, do not apply within 14 days of harvest. Avoid application when bees are actively foraging by applying during the early morning or during the evening hours. Please allow a minimum of 30 days between treatments.</p>
Artichokes	Artichoke Plume Moth	0.1-0.3 (6.4-19.2)	Apply by ground equipment only. Apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain uniform coverage. Do not apply more than 0.3 lb. a.i./A per application or more than 0.9 lbs. a.i. per acre per season. Buds may be harvested on the day of application. Please allow a minimum of 10 days between treatments.
Asparagus	Cutworm Complex Asparagus Beetle	0.05-0.1 (3.2-6.4)	Apply by ground equipment only. Apply in a minimum of 10 gallons of water per acre. Use sufficient water to obtain uniform coverage. Please allow a minimum of 7 days between treatments. Do not apply more than 0.1 lb. a.i./A per application or more than 0.4 lbs. a.i. per acre per season. Do not apply within 1 day of harvest.
Mushrooms (Mushroom houses and adjacent premise areas)	Mushroom Flies (Sciarid and Phorid Adults)	Apply 6 oz. ^c to 11 gals. water or 8 level tablespoons to 3 gals. water. As a guide, use 1 gal. spray per 750 sq. ft. (400 to 1,400 sq. ft.)	Spray directly to walls and ceilings as residual surface treatment only. Spray to point of runoff. Use AMBUSH 25W prior to filling house, during cool down, during spawning, up to pinning and between breaks. Do not use when mushrooms are present. Treat as needed when flies appear. Do not make more than 20 applications prior to pinning of first break; apply no more than 2 applications between each break. Do not apply more than 30 applications total per crop of 5 breaks. Do not apply within 3 days of harvest.
Soybeans	<p>Green Cloverworm Mexican Bean Beetle Bean Leaf Beetle Cabbage Looper Potato Leafhopper Velvetbean Caterpillar Saltmarsh Caterpillar</p> <p>Corn Earworm Beet Armyworm Japanese Beetle*** Soybean Looper^d</p>	<p>0.05-0.1 (3.2-6.4)</p> <p>0.1-0.2 (6.4-12.8)</p>	<p>Apply by air or ground equipment. By air, apply in a minimum of 2 gallons of water per acre. By ground, apply in a minimum of 10 gallons of water per acre. Do not apply more than 0.2 lb. a.i./A per application or more than 0.4 lbs. a.i. per acre per season. Can be applied up to 60 days before harvest. Do not graze treated areas or harvest for forage or hay. Please allow a minimum of 10 days between treatments.</p>

DIRECTIONS FOR APPLICATION			
CROP	TARGET PESTS	RATE LBS AI/Acre (OZ/Acre)	REMARKS
ORNAMENTALS			
Asparagus Fern	Japanese Beetle Asparagus Beetle Lygus Bugs	0.1 (6.4)	Apply to the fern stage of the asparagus plant after spear harvest when larval and adult stage of the asparagus beetle, lygus bugs and the adult stage of the Japanese beetle are present.
Christmas Trees ^b (container and field grown)	Nantucket Pine Tip Moth	0.1-0.2 (6.4-12.8)	Apply first application when adults appear and repeat at 5 to 7 day intervals or as needed throughout the season. Use sufficient water to obtain full coverage of foliage.
Chrysanthemums (Florida only)	Vegetable Leafminer	0.1-0.2 (6.4-12.8)	Apply by ground.
Conifers ^b (container and field grown)	Nantucket Pine Tip Moth	0.1-0.2 (6.4-12.8)	Apply first application when the adults appear and repeat at 5 to 7 day intervals or as needed throughout the season. AMBUSH 25W may be diluted in a nonvolatile vegetable oil or in water in a minimum of 1 gallon of finished spray per acre using equipment calibrated to give adequate coverage.
Ornamentals Nursery Stock ^b (field grown)	Beet Armyworm Cabbage Looper Citrus Thrip Heliothis Spp. Leafhoppers Leafminers Whiteflies Cutworms	0.1-0.2 (lbs. a.i./100 gals.)	Marginal leaf burn may occur on Salvia, Dieffenbachia and Pteris Fern. Application to blooming plants may cause browning of petals. Not all species and varieties have been tested. Before treating large numbers of plants of a particular variety, treat a few plants and observe prior to full-scale application. Apply to nonbearing plants of fruiting species.
Roses ^b (field grown)	Heliothis Spp.	0.1-0.2 (6.4-12.8)	Apply by air or ground equipment. Apply in a minimum of 2 gallons per acre by air and 10 gallons of finished spray per acre with ground equipment.
Roses ^b (greenhouse)	Beet Armyworm Cabbage Looper Omnivorous Leafroller	8 fl. oz./100 gals. water	AMBUSH 25W is not phytotoxic to the following varieties of greenhouse roses: Ballena, Bettina, Cara Mia, Coquette, Excitement, Forever Yours, G. Wave, Jack Frost, Jr. Bridesmaid, Matador, Paul's Pink, Samantha, Seventeen, Town Crier, Tropicana and Visa. Other varieties may vary in their sensitivity to AMBUSH 25W, and a small number of plants should be treated under local conditions to determine plant safety prior to commercial use.

NOTE: Do not tank mix AMBUSH® 25W Insecticide with BICEP®, GRAMOXONE® SUPER/GRAMOXONE® EXTRA.

- * LEAFY VEGETABLES (Except Brassica): Amaranth (leafy amaranth, Chinese spinach, tampala); arrugla (Roquette); Cardoon; celery; Chinese celery; celtuce; chervil; corn salad; chrysanthemum, edible-leaved; chrysanthemum, garland; cress, garden; cress upland (yellow rocket, winter cress); dandelion; dock (sorrel); endive (escarole); fennel, Florence; lettuce (head and leaf); orach; parsley; purslane, garden; purslane, winter; radicchio (red chicory); rhubarb; spinach; spinach, vine (Malabar spinach, Indian spinach); spinach, New Zealand; Swiss chard.
- + CUCURBIT VEGETABLES: Chayote (fruit); Chinese Waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourds, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); muskmelons, including hybrids such as true cantaloupe, cantaloupe, casaba, crenshaw, golden pershaw melon, honeydew melons, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon; pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini, and winter (butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon, including hybrids.
- ** AMBUSH 25W may be applied in tank mixtures with the following herbicides in accordance with label limitations and precautions. Label dosage rates should not be exceeded. LASSO®/Atrazine Premix; LASSO® 4E & ME; DUAL® 8E; Atrazine 4L & 80W; BLADEX® 80W & 4L; PRINCEP®; PRINCEP® CALIBER® 90; 2,4-D; ROUNDUP®, BRONCO®, BANVEL®, EXTRAZINE®

*** Not for control of this insect in California.

- ^a Aids in suppression.
- ^b Currently not registered for use in California.
- ^c 1 oz. of this powder equals 5 level teaspoons.
- ^d Maximum use rate in California is 0.1 lbs. a.i. per acre.
- ^e Under heavy insect pressure use 0.2 lbs. a.i. per acre. A second application of alternate chemistry may be necessary to reduce populations below economic thresholds.

RATE CONVERSION CHART								
AMBUSH 25W INSECTICIDE TREATMENT RATE (LBS. A.I. PER ACRE)								
	.05	.10	.15	.20	.25	.30	.35	.40
# Acres/ 1 lb.	5	2-1/2	1-2/3	1-1/4	1	5/6	5/7	5/8
# Acres/ 2 lb.	10	5	2-1/3	2-1/2	2	1-2/3	1-3/7	1-1/4

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage or disposal. Do not reuse empty container.

PESTICIDE STORAGE: Mix as needed. Do not store diluted material. Keep container closed when not in use. Do not store near food or feed. In case of spill on floor or paved surfaces, sweep up and remove to chemical waste area.

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

CONTAINER DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that this product is reasonably fit for the purposes set forth in the directions for use, subject to the inherent risks referred to herein, when it is used in accordance with such directions; and (c) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions.

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