

264-745

9-30-2003

1127

Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060, Approval expires 2-18-95



United States  
Environmental Protection Agency  
Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number

**Application for Pesticide - Section I**

1. Company/Product Number 264-745	2. EPA Product Manager George LaRocca	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Baythroid 2	PM# 13	
5. Name and Address of Applicant (Include ZIP Code) Bayer CropScience 2 T.W. Alexander Drive Research Triangle Park, NC 27709 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

**Section - II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

**NOTIFICATION**

SEP 30 2003

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Adding pests as allowed by PR Notice 98-10 and EPA Regulations at 40 CFR 152.46. A detailed list is provided in the cover letter with this Notification. We have efficacy data for each pests added.

**Section - III**

1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt.	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/> ON CONTAINER	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Jamin Huang, Ph.D.	Title Registration Product Manager	Telephone No. (Include Area Code) 919-549-2634
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6 Date Application Received (Stamped)
2. Signature 	3. Title Registration Product Manager	
4. Typed Name Jamin Huang, Ph.D.	5. Date September 22, 2003	

# Bayer CropScience



September 22, 2003

Document Processing Desk (NOTIF)  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, Virginia 22202-4501

**Re: Notification of the Addition of Insects Controlled/Suppressed to the Labeling of Baythroid 2 (EPA Reg. No.: 264-745; formerly, 3125-351)**

Dear Madam/Sir,

Bayer CropScience  
2 T.W. Alexander Drive  
Research Triangle Park, NC 27709  
Phone: 919 549-2000

As allowed by PR Notice 98-10 and EPA regulations at 40 CFR 152.46, we are adding the following pests to the specified crops or footnote to specified pest/crop onto the labeling of **Baythroid 2** (EPA Reg. No.: 264-745). We have efficacy data for each pest added.

## Alfalfa:

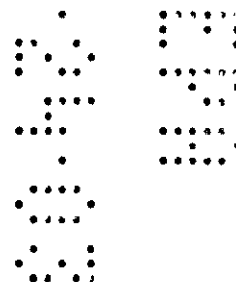
Add armyworm, corn rootworms (adult), cucumber beetles (adult), grape colaspis (adult), Japanese beetle (adult), June beetle (adult), loopers, Mexican bean beetles, stink bugs, threecornered alfalfa hopper, velvetbean caterpillar, yellowstriped armyworm (1<sup>st</sup> and 2<sup>nd</sup> instar) to the Pests Controlled List

Add cowpea aphid to the Pests Suppressed list.

Change "whitefly" to "whitefly (adult)" in the Pests Suppressed list.

## Corn:

Add bean leaf beetle, cereal leaf beetle and yellow striped armyworm (1<sup>st</sup> and 2<sup>nd</sup> instar) to the Pests Controlled list. Also add a footnote of "Application must be made prior to the larva boring into the plant" to European corn borer and Southwestern corn borer.



Change "corn rootworm (adult)" to "corn rootworms (adult)" in the Pests Controlled list.

**Cotton:**

Change "whitefly" to "whitefly (adult)" in the Pests Suppressed list.

**Sorghum:**

Add black woolly bear, European corn borer, Southwestern corn borer, webworms and yellowstriped armyworm (1<sup>st</sup> and 2<sup>nd</sup> instar) and Chinch bug with a footnote of "Application must be made prior to the larva boring into the plant" to European corn borer and Southwestern corn borer to the Pest Controlled list.

**Soybean:**

Add green cloverworm and corn rootworms (adult) to the Pests Controlled list.

Add soybean aphid to the Pest Suppressed list.

**Sugarcane:**

Add a footnote of "Application must be made prior to the larva boring into the plant" to Sugarcane borer and Rice stalk borer in the Pest Controlled list.

**Cole crops:**

Add armyworm to the Pests Controlled list.

Change "whitefly" to "whitefly (adult)" in the Pests Suppressed list.

**Lettuce:**

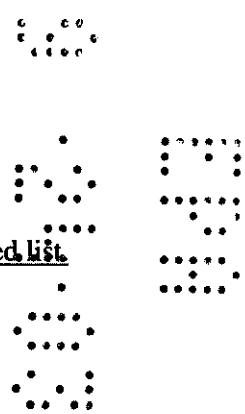
Change "whitefly" to "whitefly (adult)" in the Pests Suppressed list.

**Pepper:**

Change "whitefly" to "whitefly (adult)" in the Pests Suppressed list.

**Sweet corn:**

Change "corn rootworm (adult)" to "corn rootworms (adult)" in the Pests Controlled list.



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**Tomato:**

Delete Dipterous leafminer from the Pest Controlled list.

Add leafminers to the Pests Suppressed list.

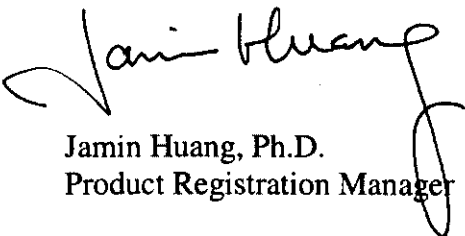
Change "whitefly" to "whitefly (adult)" in the Pests Suppressed list.

I herein certify that the only change in this Notification is the addition of the pests and the footnote listed above.

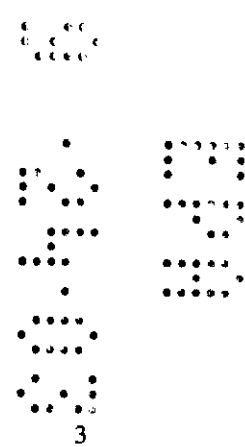
Enclosed with this letter are the completed EPA Form 8570-1 dated September 22, 2003, one copy of the new labeling with the changes highlighted, and the three (3) plain copies of the new labeling dated September 22, 2003.

Please contact me at [jamin.huang@bayercropscience.com](mailto:jamin.huang@bayercropscience.com) or at 919-549-2634 if you have any questions regarding this notification.

Sincerely,

  
Jamin Huang, Ph.D.  
Product Registration Manager

Attachments



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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.

# Baythroid<sup>®</sup> 2 Emulsifiable Pyrethroid Insecticide

NOTIFICATION  
SEP 30 2003

For control of certain insect pests on field, vegetable, tree and vine crops.

### ACTIVE INGREDIENT:

Cyfluthrin

Cyano(4-fluoro-3-phenoxyphenyl)methyl-3-(2,2-dichloroethenyl)-2,2-dimethyl-cyclopropanecarboxylate ..... 25%

INERT INGREDIENTS: ..... 75%

Contains 2 lb Cyfluthrin per gallon.

(This product contains aromatic petroleum distillates.)

EPA Reg. No. 264-745

EPA Est. No.

**STOP - Read the label before use**  
**KEEP OUT OF REACH OF CHILDREN**  
**DANGER PELIGRO**

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.)

For **MEDICAL** And **TRANSPORTATION** Emergencies **ONLY** Call 24 Hours A Day 1-800-334-7577  
For **PRODUCT USE** Information Call 1-866-99BAYER (1-866-992-2937)

### FIRST AID

<b>If in eyes</b>	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. 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 swallowed</b>	<ul style="list-style-type: none"> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give any liquid to the person.</li> <li>Do not give anything by mouth to an unconscious person.</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 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>

In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577.  
Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

**Note To Physician: ANTIDOTE** - No specific antidote is available. Treat symptomatically. Published data indicate vitamin E acetate can prevent and/or mitigate symptoms of paresthesia caused by synthetic pyrethroids. Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Corrosive. Causes irreversible eye damage. Do not get in eyes or on clothing. Wear protective eyewear (goggles or face shield). Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. May be fatal if inhaled. Do not breathe vapors or spray mist. Harmful if swallowed or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals.

Do not contaminate feed or food. Keep out of reach of children.

**Personal Protective Equipment:** Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category G on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

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

**Engineering controls statements:** 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.

### User Safety Recommendations

**User 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.

### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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 if bees are visiting the treatment area. Additional information may be obtained by consulting your Cooperative Extension Service.

### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame.

## DIRECTIONS FOR USE

### Restricted Use Pesticide

**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.

### 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, such as barrier laminate or viton
- Shoes plus socks
- Protective eyewear

### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool, dry place and away from open flame and extreme heat. Store in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If container is leaking, invert container to prevent leakage. If the container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. Bayer CropScience Emergency Response Telephone No. is 1-800-334-7577.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL - NON-REFILLABLE CONTAINER:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**CONTAINER DISPOSAL - RETURNABLE/REFILLABLE SEALED CONTAINER:** Do not rinse container. Do not break seals. Replace the dust cover/cap and return container, intact to point of purchase.

**BAYTHROID 2 may be used for control of a broad spectrum of insect pests by contact action. Because of this contact activity, good spray coverage of the crop is needed for the highest level of control.**

### INSECT RESISTANCE STATEMENT

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 alone may not continue to provide adequate control of resistant pests. If poor performance cannot be attributed to improper application, extreme weather conditions, etc., 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/state Extension agent for the best alternative method of control in your area. Consult your state Cooperative Extension Service agent or agricultural advisor for insect resistance management strategies and recommended insect control methods in your area.

### APPLICATION GUIDELINES

**For all insects, timing of application should be based on careful scouting and local economic thresholds.**

#### Foliar Spray Application

Foliar applications may be made using properly calibrated ground sprayers, fixed- or rotary-winged aircraft or through properly designed, sprinkler-type, chemigation equipment (See Chemigation Application directions below). Thorough and uniform coverage of plants, with direct contact of the spray mixture to the target pests, is required for satisfactory control.

Avoid application procedures where thorough coverage of plant is not possible. Applications made with less than thorough coverage may result in slower activity and/or less overall control from a single application than an application made with higher gallonages. See general, Spray Drift Reduction Management, section below for application guidelines on minimizing drift from all application methods.

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**Ground applications** should be made in a minimum of 10 gallons/A.

**Aerial applications** should be made in a minimum of 2 gallons/A, however 5 gallons/A are recommended. See crop specific gallowage requirements. Aerial applications made to dense canopies may not provide sufficient coverage of lower leaves to provide pest control. Higher labeled rates of BAYTHROID 2 may be necessary for aerial applications.

**Chemigation applications** (See Chemigation Application directions below) should be made as concentrated as possible. For best results apply at 100% input/travel speed, for center pivots or 0.10 inch (2,716 gallons) up to 0.15 inch (4,073 gallons) of water/A, for other systems. Higher labeled rates of BAYTHROID 2 may be necessary for chemigation applications.

### **Chemigation Application**

**Types of Irrigation Systems:** BAYTHROID 2 may be applied through sprinkler type irrigation systems, only. These types include; center pivot, lateral move, or solid set irrigation systems. Do not apply BAYTHROID 2 through any other type of irrigation system.

**Injection for Chemigation:** Inject the specified dosage of BAYTHROID 2 into the irrigation main, water stream: (1) through a constant flow, metering device; (2) into the center of the main line flow via a pitot tube or equivalent; (3) at a point ahead of at least one, right-angle turn in main stream flow such that thorough mixing with the irrigation water is ensured.

**Uniform Water Distribution and System Calibration:** The irrigation system must provide uniform distribution of BAYTHROID 2 treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in or on the crop can result from non-uniform distribution. The system must be calibrated to uniformly distribute the rates specified for chemigation application to specific crops. If you have questions about calibration, contact your Cooperative Extension Service agent, equipment manufacturers, or other experts.

**Chemigation Monitoring:** A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Required Injection and Sprinkler System Safety Devices:** The system must contain a functional check valve, vacuum relief valve, and low pressure drain, appropriately located on the irrigation pipeline to prevent water source contamination from back-flow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must also 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/engine stops, or in cases where there is no water pump, when water pressure decreases to the point where pesticide distribution is adversely affected. Injection systems must use a metering pump or equivalent, such as a positive displacement injection pump (e.g., diaphragm pump, venturi injection) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

**Public Water Systems:** DO NOT APPLY BAYTHROID 2 THROUGH ANY IRRIGATION SYSTEM, PHYSICALLY CONNECTED TO A PUBLIC WATER SYSTEM. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. BAYTHROID 2 may be applied through any of the recommended types of irrigation systems that may be supplied by a public water system only if the water from the public water system is discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Before beginning chemigation, always make sure that the air gap exists and that there is no blockage of the overflow of the reservoir tank. Any irrigation system using water supplied from a public water system must also meet the same safety requirements as for any other type of water supply and include the same safety devices.

**Chemical Supply Tank Dilution and Agitation:** For injection of BAYTHROID 2 use a chemical supply tank for pre-mixing BAYTHROID 2 with either, water or non-emulsifiable oil before injecting mixture into the irrigation line. Dilution ratio should be at least 4 parts of either water/ or non-emulsifiable oil, to 1 part BAYTHROID 2. If necessary, constant mechanical or hydraulic agitation should be maintained in the chemical supply tank during the entire period of application. Determine the required amounts of BAYTHROID 2 and either water or non-emulsifiable oil, to mix in the tank. The amount of BAYTHROID 2 needed equals the number of fluid ounces of BAYTHROID 2 to be applied per acre multiplied by the number of acres to be chemigated. The amount of emulsion needed equals the gallons of emulsion delivered per hour by the injection pump, multiplied by the number of hours chemigation will take place. The amount of either water or non-emulsifiable oil needed equals the amount of emulsion needed minus the amount of BAYTHROID 2 needed.

**Posting Requirements:** Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care centers, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when the chemigated area is open to the public such as golf courses or retail greenhouses.

Posting must conform to the following requirements: Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other location affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.

All words shall consist of letters at least 2-1/2 inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.



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This sign is in addition to any sign posted to comply with the Worker Protection Standard.

**Cleaning the Chemical Injection System:** In order to apply pesticides accurately, the chemical injection system must be kept clean; free from chemical or fertilizer residues and sediments. Refer to your owner's manual or ask your equipment supplier for the cleaning procedure for your injection system.

**Flushing the Irrigation System:** At the end of the application period, allow time for all lines to flush the pesticide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of pesticides, a dye indicator may be injected into the lines to mark the end of the application period.

**Center-Pivot and Automatic-Move Linear Systems:** Inject the specified dosage per acre continuously for one complete revolution (center pivot) or move of the system. The system should be run at maximum speed. It is recommended that nozzles in the immediate area of control panels, chemical supply tanks, pumps and system safety devices be plugged to prevent chemical contamination of these areas. The use of END GUNS is NOT recommended. End guns that provide uneven distribution of treated water can result in crop injury, lack of effectiveness, or illegal pesticide residues in or on the crop.

**Solid Set and Manually Controlled Linear Systems:** Injection should be during the last 30 to 60 minutes of a regular irrigation period or as a separate 30 to 60 minute application not associated with a regular irrigation.

**OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.**

#### **Spray Drift Reduction Management**

Do not apply when wind speed favors drift beyond the area intended for treatment. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

#### **Buffer Zone Requirements:**

**Ground, Follar Applications:** Do not apply by ground within 25 feet of lakes; reservoirs; rivers; permanent streams, marshes or natural ponds; estuaries and commercial fish farm ponds. Increase the buffer zone to 450 feet when an ultra low volume (ULV) application is made.

**Aerial Applications:** Do not apply by air within 150 feet of lakes; reservoirs; rivers; permanent streams, marshes or natural ponds; estuaries and commercial fish farm ponds. The spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

**Importance of Droplet Size:** An important factor influencing drift is droplet size. Small droplets (<150 to 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray boom pressure. Spray should be released at the lowest possible height consistent with good pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

**Wind Speed Restrictions:** Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Avoiding applications when wind direction is toward the aquatic area can reduce risk of exposure to sensitive aquatic areas.

**Restrictions During Temperature Inversions:** Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog. However, if fog is not present, the movement of smoke from a ground source can also identify inversions. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

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## **RUNOFF MANAGEMENT**

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When used on erodible soils, best management practices for minimizing runoff should be employed. Consult your local Soil Conservation Service for recommendations in your use area. Do not apply if soil is saturated with water. Do not apply under conditions that favor drift from runoff. Do not apply in the rain.

### **FIELD CROPS**

#### ***RECOMMENDED APPLICATIONS – BAYTHROID 2***

For all crops, apply specific dosage of BAYTHROID 2 at early threshold for target pest, as population begins to develop. Degree of control or suppression of additional labeled pests will be determined, in part by the stage of pest development at application and infestation level of those pests.

Application timing should be based on local economic thresholds. Use the higher rates for moderate to heavy insect pressure. Lower rates are generally adequate for low to moderate insect pressure but require careful scouting and may require more frequent application.

BAYTHROID 2 is an Emulsifiable Concentrate formulation and is active by contact and ingestion. Thorough coverage is necessary for optimum performance.

See application recommendations at the beginning of each section: **FIELD CROPS; VEGETABLE CROPS; TREE and VINE CROPS.**

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<b>ALFALFA</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Alfalfa looper Cutworms Green cloverworm Meadow spittlebug Potato leafhopper	0.8 - 1.6	0.013 – 0.025
Alfalfa caterpillar Alfalfa plant bug Alfalfa webworm Alfalfa weevil Armyworm Aster leafhopper Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Corn earworm Corn rootworms (adult) Cucumber beetles (adult) Egyptian alfalfa weevil Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Grape colaspis (adult) Japanese beetle (adult) June beetle (adult) Loopers Lygus bug Mexican bean beetle Stink bugs Tarnished plant bug Threecornered alfalfa hopper Velvetbean caterpillar Yellowstriped armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	1.6 - 2.8	0.025 – 0.044
Blotch leafminer Grasshoppers Western yellowstriped armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	2.0 - 2.8	0.031 – 0.044
<b>PESTS SUPPRESSED</b>		
Blue pea aphid Cowpea aphid Pea aphid Whitefly (adult)	2.8	0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI) or Pre-Grazing Interval: <b>7 days.</b></p> <p>Maximum BAYTHROID 2 allowed per cutting: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre).</b></p> <p>Maximum BAYTHROID 2 allowed per crop season: <b>11.2 fluid ounces/A (0.175 lbs AI/Acre).</b></p> <p>Maximum number of applications per season: <b>4.</b></p> <p>Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.</p> <p>Minimum ULV application volume (once refined cotton seed/vegetable oil): 1.0 qt/A – aerial application.</p> <p>Due to potential injury to bees, do not apply to alfalfa grown for seed.</p> <p>Do not apply to mixed stands with intentionally-grown forage grasses.</p> <p>See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.</p>		

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<b>CORN**</b>		
<b>Field Corn, Popcorn, Seed Corn (see Sweet Corn recommendations in Vegetable Crops Section)</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Black cutworm	0.8 - 1.6	0.013 – 0.025
Granulate cutworm		
Sandhill cutworm		
Armyworm	1.6 - 2.8	0.025 – 0.044
Bean leaf beetle		
Cereal leaf beetle		
Chinch bug		
Click beetle (adult)		
Corn earworm		
Corn rootworms (adult)		
European corn borer*		
Flea beetle		
Grape colaspis (adult)		
Japanese beetle(adult)		
June beetle (adult)		
Masked chafer (adult)		
Southern corn leaf beetle		
Southwestern corn borer*		
Stalk borer		
Stink bugs		
Webworm		
Western bean cutworm		
Yellowstriped armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)		
Grasshoppers	2.1 - 2.8	0.033 – 0.044
Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	2.8	0.044

**Notes:** Pre-Harvest Interval (PHI): For grain or fodder **21 days**; Green forage may be fed **0 days** after last application.  
 Maximum BAYTHROID 2 allowed per 7-day interval: **2.8 fluid ounces/A (0.044 lbs AI/Acre)**.  
 Maximum BAYTHROID 2 allowed per crop season: **11.2 fluid ounces/A (0.175 lbs AI/Acre)**.  
 Maximum number of applications per season: **4**. *Three* applications may be applied up to early dent stage. *One* application may be made between early dent and 21 days before harvest.  
 Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.  
 Minimum ULV application volume (once refined cotton seed/vegetable oil): 1.0 qt/A – aerial application.  
 See CHEMIGATION statement in *Application Guidelines* section of this label.  
 BAYTHROID 2 may be applied before, during, or after planting.  
 \* Application must be made prior to the larva boring into the plant.  
 \*\*Use not permitted in CA unless accompanied by supplemental label.

<b>COTTON</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cotton leafperforator Cotton leafworm Cutworms Thrips	0.8 – 1.6	0.013 – 0.025
Boll weevil Cabbage looper Cotton aphid Cotton bollworm* Cotton fleahopper Cucumber beetle European corn borer Flea beetles Garden webworm Lygus bug* Pink bollworm Saltmarsh caterpillar Southern garden leafhopper Stink bugs Tarnished plant bug* Threecornered alfalfa hopper Tobacco budworm* <b>Ovicidal Control:</b> Cotton bollworm and tobacco budworm	1.6 – 2.6	0.025 – 0.041
Grasshopper	2.0 – 2.8	0.031 – 0.044
Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Cotton leafminer Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Soybean looper Yellowstriped armyworm	3.2	0.050
<b>PESTS SUPPRESSED</b>		
Whitefly (adult)	3.2	0.050
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>0 day.</b>            Maximum BAYTHROID 2 allowed per 3-day interval: <b>3.2 fluid ounces/A (0.050 lbs AI/Acre).</b>            Maximum BAYTHROID 2 allowed per crop season: <b>32.0 fluid ounces/A (0.500 lbs AI/Acre).</b>            Maximum number of applications: <b>10.</b>            Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.            Minimum ULV application volume (once refined cotton seed/vegetable oil): 1.0 qt/A – aerial application.            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.            *See INSECT RESISTANCE statement elsewhere on this label.            Do not graze treated fields.            Do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Synthetic pyrethroid products include Ambush® Insecticide, Ammo® Insecticide, Asana® XL Insecticide, BAYTHROID® 2 Emulsifiable Pyrethroid Insecticide, Capture® Insecticide/Miticide, Danitol® 2.4 EC Spray Emulsifiable Insecticide/Miticide, Decis® Insecticide, Fury™ Insecticide, Karate® Insecticide, Mustang® Insecticide, Pounce® Insecticide, Scout X-tra® Insecticide, SynerGin™ 2 Insecticide and Warrior® Insecticide.</p>		

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<b>SORGHUM</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms Sorghum midge	1.0 – 1.3	0.016 – 0.020
Armyworm Black wooly bear European corn borer* Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) False chinch bug Flea beetle Sorghum headworm (corn earworm) Sorghum webworm Southwestern corn borer* Stink bugs Webworms Yellowstriped armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	1.3 – 2.8	0.020 – 0.044
Chinch bug Grasshoppers	2.0 – 2.8	0.038 – 0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>14 days</b>.</p> <p>If more than 5.6 fluid ounces/Acre is applied, allow at least 14 days between last application and grazing.</p> <p>Maximum BAYTHROID 2 allowed per 10-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.</p> <p>Maximum BAYTHROID 2 allowed per crop season: <b>8.4 fluid ounces/A (0.131 lbs AI/Acre)</b>.</p> <p>Maximum number of applications: <b>6</b>.</p> <p>Minimum application volume (water): 10.0 GPA – ground; 2.0 – aerial application.</p> <p>Minimum ULV application volume (once refined cotton seed/vegetable oil): 1.0 qt/A – aerial application.</p> <p>See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.</p> <p>* Application must be made prior to the larva boring into the plant.</p>		

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<b>SOYBEAN**</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms Potato leafhopper Thrips Green cloverworm	0.8 – 1.6	0.013 – 0.025
Armyworm Bean leaf beetle Bean leaf webber Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Blister beetle Cabbage looper Click beetle (adult) Corn earworm Corn rootworms (adult) Cucumber beetle European corn borer Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Grape colaspis (adult) Japanese beetle (adult) June beetle (adult) Lygus bug Masked chafer (adult) Mexican bean beetle Saltmarsh caterpillar Silerspotted skipper Stink bugs Tarnished plant bug* Threecornered alfalfa hopper Tobacco budworm* Velvetbean caterpillar Webworm Woollybear caterpillar Yellowstriped armyworm	1.6 – 2.8	0.025 – 0.044
Grasshoppers	2.1 – 2.8	0.033 – 0.044
<b>PESTS SUPPRESSED</b>		
Lesser cornstalk borer Soybean aphid Soybean looper*	2.8	0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI) or feeding of dry vines: <b>45 days</b>. Green forage may be fed 15 days after last application.  Maximum BAYTHROID 2 allowed per 7-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.  Maximum BAYTHROID 2 allowed per crop season: <b>11.2 fluid ounces/A (0.175 lbs AI/Acre)</b>.  Maximum number of applications per season: <b>4</b>.  Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.  Minimum ULV application volume (once refined cotton seed/vegetable oil): 1.0 qt/A – aerial application.  See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.  *See INSECT RESISTANCE statement elsewhere on this label.  **Use not permitted in CA unless accompanied by supplemental label.</p>		

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<b>SUGARCANE</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Sugarcane borer*	2.1	0.033
Rice stalk borer*	2.8	0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>15 days</b>.            Maximum BAYTHROID 2 allowed per 7-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.            Maximum BAYTHROID 2 allowed per crop season: <b>16.8 fluid ounces/A (0.263 lbs AI/Acre)</b>.            Maximum number of applications: <b>6</b>.            Minimum application volume (water): 20.0 GPA – ground; 2.0 GPA – aerial application.            Minimum ULV application volume (once refined cotton seed/vegetable oil): 1.0 qt/A – aerial application.            Do not apply if soil is saturated with water.            Do not apply under conditions that favor runoff.            Do not apply in the rain.            * Application must be made prior to the larva boring into the plant.</p>		

<b>SUNFLOWER</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms	0.8 – 1.6	0.013 – 0.025
Sunflower beetle		
Sunflower stem weevil (adult)	1.6 – 2.4	0.025 – 0.038
Banded sunflower moth	2.0 – 2.8	0.031 – 0.044
Grasshoppers		
Stink bugs		
Sunflower bud moth		
Sunflower headclipping weevil		
Sunflower midge		
Sunflower moth		
Sunflower seed weevil		
<p><b>Notes:</b> Pre-Harvest Interval (PHI) and Pre-grazing or Foraging Interval: <b>30 days</b>.            Maximum BAYTHROID 2 allowed per 7-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.            Maximum BAYTHROID 2 allowed per crop season: <b>8.4 fluid ounces/A (0.131 lbs AI/Acre)</b>.            Maximum number of applications: <b>6</b>.            Minimum application volume (water): 10.0 GPA – ground; 2.0 – aerial application (DO NOT apply ULV).            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.</p>		



17/27

**VEGETABLE CROPS**

**RECOMMENDED APPLICATIONS – BAYTHROID 2**

For all crops, apply specific dosage of BAYTHROID 2 at early threshold for target pest, as population begins to develop. Degree of control or suppression of additional labeled pests will be determined, in part by the stage of pest development at application and infestation level of those pests.

Application timing should be based on local economic thresholds. Use the higher rates for moderate to heavy insect pressure. Lower rates are generally adequate for low to moderate insect pressure but require careful scouting and may require more frequent application.

BAYTHROID 2 is an Emulsifiable Concentrate formulation and is active by contact and ingestion. Thorough coverage is necessary for optimum performance.

See application recommendations at the beginning of each section: **FIELD CROPS; VEGETABLE CROPS; TREE and VINE CROPS.**

<b>CARROT</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms	1.6	0.025
Aster leafhopper	1.6 – 2.8	0.025 – 0.044
Carrot weevil	2.8	0.044

**Notes:** Pre-Harvest Interval (PHI): **0 day.**

Maximum BAYTHROID 2 allowed per 7-day interval: **2.8 fluid ounces/A (0.044 lbs AI/Acre).**

Maximum BAYTHROID 2 allowed per crop season: **14.0 fluid ounces/A (0.220 lbs AI/Acre).**

Maximum number of applications: **5.**

Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.

Due to potential injury to bees, do not apply to carrot grown for seed.

See CHEMIGATION statement in *Application Guidelines* section of this label.

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<b>COLE CROPS**</b>		
<b>Broccoli, Chinese (gai lon) broccoli, Brussels sprouts, Cabbage, Chinese (napa) cabbage, Chinese mustard (gai choy) cabbage, Cauliflower, Cavalo broccoli, Kohlrabi, Mustard greens</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms Potato leafhopper Thrips	0.8 – 1.6	0.013 – 0.025
Alfalfa looper Cabbage looper Cabbage webworm Imported cabbageworm Southern cabbageworm	1.6 – 2.4	0.025 – 0.038
Armyworm Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Cabbage flea beetle Corn earworm Diamondback moth (larvae)* Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Grasshoppers Japanese beetle (adult) Lygus bug Meadow spittlebug Southern armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Stink bugs Tarnished plant bug* Vegetable weevil (adult) Yellowstriped armyworm	2.4 – 3.2	0.038 – 0.050
<b>PESTS SUPPRESSED</b>		
Whitefly (adult)	3.2	0.050
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>0 day</b>.            Maximum BAYTHROID 2 allowed per 7-day interval: <b>3.2 fluid ounces/A (0.050 lbs AI/Acre)</b>.            Maximum BAYTHROID 2 allowed per crop season: <b>12.8 fluid ounces/A (0.200 lbs AI/Acre)</b>.            Maximum number of applications: <b>4</b>.            Minimum application volume (water): 10 GPA – ground, 5 GPA – aerial application.            Due to potential injury to bees, do not apply to cole crops grown for seed.            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.            *See INSECT RESISTANCE statement elsewhere on this label.            **Use not permitted in CA unless accompanied by supplemental label.</p>		

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<b>LETTUCE**</b>		
<b>Head lettuce, Leaf lettuce</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms Potato leafhopper Thrips	0.8 – 1.6	0.013 – 0.025
Alfalfa looper Cabbage looper Green cloverworm Imported cabbageworm Saltmarsh caterpillar	1.6 – 2.4	0.025 – 0.038
Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Corn earworm Diamondback moth (larvae)* European corn borer Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Flea beetles Grasshoppers Japanese beetle (adult) Lygus bug Meadow spittlebug Southern armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Stink bugs Tarnished plant bug* Vegetable weevil (adult) Yellowstriped armyworm	2.4 – 3.2	0.038 – 0.050
<b>PEST SUPPRESSED</b>		
Whitefly (adult)	3.2	0.050
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>0 day.</b>            Maximum BAYTHROID 2 allowed per 7-day interval: <b>3.2 fluid ounces/A (0.050 lbs AI/Acre).</b>            Maximum BAYTHROID 2 allowed per crop season: <b>12.8 fluid ounces/A (0.200 lbs AI/Acre).</b>            Maximum number of applications: <b>4.</b>            Minimum application volume (water): 10 GPA – ground, 5 GPA – aerial application.            Due to potential injury to bees, do not apply to lettuce grown for seed.            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.  <b>*See INSECT RESISTANCE statement elsewhere on this label.</b>  <b>**Use not permitted in CA unless accompanied by supplemental label.</b></p>		

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<b>PEA, DRY**</b>		
<b>Pigeon pea, Chick pea, Garbonzo bean, Lentil</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms	0.8 – 1.6	0.013 – 0.025
Potato leafhopper		
Stink bugs	1.6 – 2.4	0.025 – 0.038
Lygus bug		
Soybean looper	2.4 – 3.2	0.038 – 0.050
Tarnished plant bug*		
Yellowstriped armyworm		
<b>PEST SUPPRESSED</b>		
Pea aphid	3.2	0.050
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>7 days</b> (minimum time between final application and threshing for seed).  Maximum BAYTHROID 2 allowed per 14-day interval: <b>3.2 fluid ounces/A (0.050 lbs AI/Acre)</b>.  Maximum BAYTHROID 2 allowed per crop season: <b>6.4 fluid ounces/A (0.100 lbs AI/Acre)</b>.  Maximum number of applications: <b>2</b>.  Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.  See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.  Do not feed treated vines or hay to livestock.  *See INSECT RESISTANCE statement elsewhere on this label.  **Use not permitted in CA unless accompanied by supplemental label.</p>		

<b>PEA, SOUTHERN**</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	2.1	0.033
Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)		
Corn earworm		
Cowpea curculio		
Cutworms		
Grasshoppers		
Lygus bug		
Potato leafhopper		
Stink bugs		
Southern armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)		
Tarnished plant bug*		
Thrips		
Yellowstriped armyworm		
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>3 day</b>.  Maximum BAYTHROID 2 allowed per 5-day interval: <b>2.1 fluid ounces/A (0.033 lbs AI/Acre)</b>.  Maximum BAYTHROID 2 allowed per crop season: <b>10.5 fluid ounces/A (0.165 lbs AI/Acre)</b>.  Maximum number of applications: <b>5</b>.  Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.  Due to potential injury to bees, do not apply to southern peas grown for seed.  See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.  Do not feed treated vines or hay to livestock.  Do not apply to cowpea or southern pea varieties grown for livestock feed.  *See INSECT RESISTANCE statement elsewhere on this label.  **Use not permitted in CA unless accompanied by supplemental label.</p>		

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<b>PEPPER</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Celery leaf-tier Corn earworm European corn borer Garden webworm Potato leafhopper Stink bugs	1.6 - 2.8	0.025 - 0.044
Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar) Cabbage looper Thrips (except <i>Thrips palmi</i> ) Western yellowstriped armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	2.1 - 2.8	0.033 - 0.044
Flea beetles	2.8	0.044
<b>PESTS SUPPRESSED</b>		
Leafminer Pepper weevil* Whitefly (adult)	2.8	0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>7 day</b>.</p> <p>Maximum BAYTHROID 2 allowed per 7-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.</p> <p>Maximum BAYTHROID 2 allowed per crop season: <b>16.8 fluid ounces/A (0.263 lbs AI/Acre)</b>.</p> <p>Maximum number of applications: <b>6</b>.</p> <p>Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.</p> <p>See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.</p> <p>*See INSECT RESISTANCE statement elsewhere on this label.</p>		

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<b>POTATO</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms Potato leafhopper	0.8 - 1.6	0.013 – 0.025
Cabbage looper Colorado potato beetle* Eggplant flea beetle European corn borer Potato flea beetle Potato psyllid Potato tuberworm Tarnished plant bug*	1.6 - 2.8	0.025 – 0.044
<b>PESTS SUPPRESSED</b>		
Aphids	2.8	0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>0 day</b>.            If more than 5.6 fluid ounces/Acre is applied, allow at least 14 days between last application and grazing.            Maximum BAYTHROID 2 allowed per 5-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.            Maximum BAYTHROID 2 allowed per crop season: <b>16.8 fluid ounces/A (0.263 lbs AI/Acre)</b>.            Maximum number of applications: <b>6</b>.            Minimum application volume (water): 10.0 GPA – ground; 2.0 GPA – aerial application.            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.            *See INSECT RESISTANCE statement elsewhere on this label.</p>		

<b>RADISH</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Cutworms Flea beetles	1.6 - 2.8	0.025 – 0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>0 day</b>.            Maximum BAYTHROID 2 allowed per 7-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.            Maximum BAYTHROID 2 allowed per crop season: <b>14.0 fluid ounces/A (0.219 lbs AI/Acre)</b>.            Maximum number of applications: <b>5</b>.            Minimum application volume (water): 10.0 GPA – ground; 2.0 GPA – aerial application.            Do not harvest radish tops (leaves) for human consumption.            Due to potential injury to bees, do not apply to radish grown for seed.            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.</p>		

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<b>SWEET CORN</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Black cutworm Granulate cutworm Sandhill cutworm	0.8 - 1.6	0.013 – 0.025
Armyworm Chinch bug Corn earworm Corn rootworms (adult) Corn silk fly European corn borer Flea beetles Southern corn leaf beetle Southwestern corn borer Stalk borer Western bean cutworm	1.6 - 2.8	0.025 – 0.044
Grasshoppers	2.0 - 2.8	0.031 – 0.044
Fall armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	2.8	0.044
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>0 day</b>.            Maximum BAYTHROID 2 allowed per 7-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre)</b>.            Maximum BAYTHROID 2 allowed per crop season: <b>28.0 fluid ounces/A (0.440 lbs AI/Acre)</b>.            Maximum number of applications: <b>10</b>.            Minimum application volume (water): 10.0 GPA – ground; 2.0 – aerial application.            Minimum ULV application volume (once refined cotton seed/vegetable oil): 1.0 qt/A – aerial application.            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.</p>		

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<b>TOMATO</b>		
<b>PESTS CONTROLLED</b>	<b>Rate fluid ounces/Acre</b>	<b>Rate lbs AI/Acre</b>
Colorado potato beetle*	1.6 - 2.8	0.025 - 0.044
European corn borer		
Potato aphid		
Stink bugs		
Tomato fruitworm (corn earworm)		
Tomato hornworm		
Beet armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)	2.1 - 2.8	0.033 - 0.044
Cabbage looper		
Southern armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)		
Tarnished plant bug*		
Tomato pinworm		
Variiegated cutworm		
Western flower thrips		
Western yellowstriped armyworm (1 <sup>st</sup> and 2 <sup>nd</sup> instar)		
Flea beetles	2.8	0.044
<b>PESTS SUPPRESSED</b>		
Leafminers	2.8	0.044
Whitefly (adult)		
<p><b>Notes:</b> Pre-Harvest Interval (PHI): <b>0 day.</b>            Maximum BAYTHROID 2 allowed per 7-day interval: <b>2.8 fluid ounces/A (0.044 lbs AI/Acre).</b>            Maximum BAYTHROID 2 allowed per crop season: <b>16.8 fluid ounces/A (0.263 lbs AI/Acre).</b>            Maximum number of applications: <b>6.</b>            Minimum application volume (water): 10.0 GPA – ground, 2.0 GPA – aerial application.            See CHEMIGATION statement in <i>Application Guidelines</i> section of this label.            *See INSECT RESISTANCE statement elsewhere on this label.</p>		



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**TREE and VINE CROPS**

**RECOMMENDED APPLICATIONS – BAYTHROID 2**

For tree and vine crops, application rates should be based on the Tree or Vine, Row-Volume/Density concept for either dilute or concentrate applications. For determining product required in concentrate applications, first determine amount of spray volume per acre necessary to spray-to-drip in a dilute application in a grove, yard, vineyard, or orchard. Based on this volume, calculate required formulation quantities per acre. Apply equivalent amount per acre for concentrated sprays. For orchard/vineyard airblast applications, do not spray above trees/vines and turn off outward pointing nozzles at row ends and outer rows.

BAYTHROID 2 is an Emulsifiable Concentrate (EC) formulation and is active by contact and ingestion. Thorough coverage of foliage and fruit is necessary for optimum performance.

For all crops, apply specific dosage of BAYTHROID 2 at early threshold for target pest, as population begins to develop. Degree of control or suppression of additional labeled pests will be determined, in part by the stage of pest development at application and infestation level of those pests.

Application timing should be based on local economic thresholds. Use the higher rates for moderate to heavy insect pressure. Lower rates are generally adequate for low to moderate insect pressure but require careful scouting and may require more frequent application.

See application recommendations at the beginning of each section: **FIELD CROPS; VEGETABLE CROPS; TREE and VINE CROPS.**

**CITRUS (California and Arizona, Only)**

**Orange (sweet and sour), Grapefruit, Lemon, Lime, Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Kumquat, Mandarin (tangerine), Pummelo, Satsuma mandarin**

PESTS CONTROLLED	Concentrate Rate fluid ounces/Acre (In 100 - 250 GPA)	Dilute Rate fluid ounces/100 Gallons (In 250 GPA)
Glassywinged sharpshooter	1.6 – 3.2	0.64 – 1.26
Foliar feeding cutworms Fuller rose beetle (larvae and adults on foliage) Grasshoppers Root-weevil complex (larvae and adults on foliage)	2.4 – 3.2	0.96 – 1.26
Citrus thrips	6.4	2.56

**Notes:** Pre-Harvest Interval (PHI): **0 day.**

Maximum BAYTHROID 2 allowed per 7-day interval: **6.4 fluid ounces/A (0.10 lbs AI/Acre).**

Maximum BAYTHROID 2 allowed per crop season: **6.4 fluid ounces/A (0.10 lbs AI/Acre).**

Maximum number of applications: **4** (at low rate).

Minimum application volume (water): 25 GPA – ground, 25 GPA – aerial application.

Maximum concentrate rate is based on canopy size requiring 250 gallons per acre, if sprayed to drip.

For concentrate spray application based on Row-Volume/Density, do not apply less than 1.0 fluid ounces/A.

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<b>HOP</b>		
<b>PESTS CONTROLLED</b>	<b>Concentrate Rate fluid ounces/Acre (in 100 - 250 GPA)</b>	<b>Dilute Rate fluid ounces/100 Gallons (in 250 GPA)</b>
Hop aphid Hop flea beetle Hop looper Hop plant bug	3.2	1.26
<b>Notes:</b> Pre-Harvest Interval (PHI): <b>7 days</b> . Maximum BAYTHROID 2 allowed per 14-day interval: <b>3.2 fluid ounces/A (0.050 lbs AI/Acre)</b> . Maximum BAYTHROID 2 allowed per crop season: <b>16.0 fluid ounces/A (0.250 lbs AI/Acre)</b> . Maximum number of applications: <b>5</b> . Minimum application volume (water): 25 GPA – ground, 25 GPA – aerial application. Maximum concentrate rate is based on canopy size requiring 250 gallons per acre, if sprayed to drip. For concentrate spray application based on Row-Volume/Density, do not apply less than 1.0 fluid ounces/A.		

### **CROP ROTATION STATEMENT**

Treated areas may be replanted with any crop as soon as practical after last application.

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**IMPORTANT: READ BEFORE USE**

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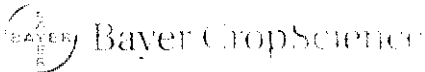
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**Bayer CropScience LP  
P.O. Box 12014, 2 T.W. Alexander Drive  
Research Triangle Park, North Carolina 27709  
1-866-99BAYER (1-866-992-2937)**

Baythroid 2 Emulsifiable Pyrethroid Insecticide (MASTER) Approved 9/27/02, Notification 9/22/03.