

PM 04

67760-32

10/21/99

10/21



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:

67760-32

Date of Issuance:

10/21/99

Term of Issuance:

Conditional

Name of Pesticide Product:

Cyren 2E XL

**NOTICE OF PESTICIDE:**

Registration  
 Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Cheminova, Inc.  
Oak Hill Park  
1700 Route 23, Suite 210  
Wayne, N.J. 07470

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.


On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA Section 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA Section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA Section 4.
2. Make the following label changes before you release the product for shipment:
  - a. Revise the EPA Registration Number to read, "EPA Reg. No. 67760-32".
3. Submit two copies of the revised final printed label before releasing the product for shipment.

Signature of Approving Official:

  
Dennis McNeilly  
Insecticide-Rodenticide Branch

Date:

Oct 21, 1999

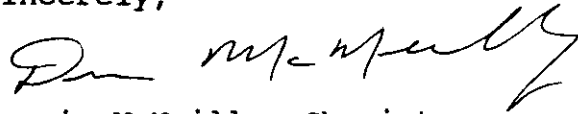
*2/2/81*

A stamped copy of the label is enclosed for your records.

If the conditions enumerated above are not complied with, the registration will be subject to cancellation in accordance with FIFRA Section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Please contact me on (703) 308-6742 if you have questions regarding this registration.

Sincerely,



Dennis McNeilly, Chemist  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

Enclosure 1) Stamped Label

3 of 21

BEFORE USING THIS PESTICIDE  
**STOP**  
READ THE LABEL

# CYREN™ 2E XL

Specialty Insecticide

BEFORE USING THIS PESTICIDE  
**STOP**  
READ THE LABEL

To be applied only by or under the supervision of commercial applicators responsible for pest control products.  
For control of various pests in and around residential and nonresidential buildings and structures, on various modes of transport, and on turf, ornamental plants, or fruit, nut, and citrus trees not grown for sale or commercial production.

**Active Ingredient:**  
Chlorpyrifos: Phosphrothioic acid, O, O-diethyl O-(3,5,6-trichloro-2-pyridinyl) ester.....24.7%  
**Inert Ingredients:** ..... 75.3%  
**Total** .....100.0%

This product contains 2 pounds of Chlorpyrifos per gallon.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION                      PRECAUCION**

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

Harmful if swallowed, inhaled or absorbed through skin • Causes moderate eye irritation. • Avoid breathing vapor or spray mist • Avoid contact with skin, eyes or clothing • Wear long-sleeved shirt and long pants, socks and shoes and chemical resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate). • Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet

IN CASE OF EMERGENCY, CALL TOLL FREE, DAY OR NIGHT, 800-228-5635, Ext. 153

EPA Reg. No.: 67760-

Net Contents:

Cyren™ is a trademark of Cheminova Agro.  
Product of Denmark

**CHEMINOVA**  
1700 Route 23, Suite 210  
Wayne, NJ 07470  
(973) 305-6600

ACCEPTED  
with COMMENTS  
In EPA Letter Dated:  
OCT 21 1999

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.  
67760-32

**Notice: READ THE ENTIRE LABEL. USE ONLY ACCORDING TO LABEL DIRECTIONS. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" elsewhere on this label.**

4021

<b>Table of Contents</b>	<b>Page</b>
<b>Precautionary Statements</b> .....	<b>3</b>
<b>Directions for Use</b> .....	<b>4</b>
Storage and Disposal .....	4
<b>General Information</b> .....	<b>4</b>
<b>General Pest Control Indoors</b> .....	<b>4</b>
Directions for General Use Indoors .....	4
PPE for General Use Indoors .....	4
Handling Procedures for General Use Indoors .....	4
Treatment Sites .....	5
Dosage Rates .....	5
Mixing Directions .....	5
Tank Mixing .....	5
Application Methods .....	5
Crack and Crevice Applications .....	5
Spot Applications .....	5
Cabinet Interiors .....	6
Food Handling Establishments .....	6
Indoor Pests Controlled by Cyren 2E .....	6
Specific Indoor Use Directions .....	6
<b>General Pest Control - Perimeter Treatments</b> .....	<b>7</b>
Directions for Perimeter Treatment .....	7
PPE for Perimeter Treatment .....	7
Handling Procedures for Perimeter Treatments .....	7
Treatment Sites .....	7
Dosage Rates .....	7
Mixing Directions .....	7
Tank Mixing .....	7
Application Methods .....	8
Low Volume Directed Sprays .....	8
High Volume Broadcast Sprays .....	8
Pests Controlled by Perimeter Treatments of Cyren 2E .....	8
Specific Use Directions for Perimeter Treatments .....	8
<b>General Control of Wood-Infesting Insects</b> .....	<b>9</b>
Directions for General Use to Control Wood-Infesting Insects .....	9
PPE for Control of Wood-Infesting Insects .....	9
Handling Procedures to Control Wood-Infesting Insects .....	9
Treatment Sites .....	9
Dosage Rates .....	9
Mixing Directions .....	9
Tank Mixing .....	9
Application Methods .....	9
Overhead Areas .....	10
Wood-Infesting Insects Controlled by Cyren 2E .....	10
Specific Use Directions for Control of Wood-Infesting Insects .....	10
<b>General Pest Control - Turf, Ornamentals, and Fruit, Nut, and Citrus Trees</b> .....	<b>10</b>
General Information .....	10
PPE for Application to Turf, Ornamentals, and Fruit, Nut, and Citrus Trees .....	10
Handling Procedures .....	11
Turf and Other Outdoor Uses .....	11
Ornamentals (Outdoor) .....	12
Sucking Insects and Mites .....	13
Defoliators and Leafminers .....	14
Borers, Bark Beetles, and Weevils .....	15
Ants, Termites, and Miscellaneous Pests .....	16
Ornamentals (Dormant Spray of Tree Pests) .....	16
Fruit, Nut, and Citrus Trees .....	17
<b>Warranty Disclaimer</b> .....	<b>19</b>
<b>Inherent Risks of Use</b> .....	<b>19</b>
<b>Limitation of Remedies</b> .....	<b>19</b>

**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animals**

**Caution      Precaution**

Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes or clothing. Wear long-sleeved shirt and long pants, socks and shoes and chemical resistant gloves (such as Nitrile, Butyl, Neoprene, and/or Barrier Laminate). Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

**First Aid**  
**Organophosphorus pesticide**

In case of poisoning, call a physician or Poison Control Center immediately. Have person lie down and keep quiet.

**If swallowed:** Call a physician or Poison Control Center, Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

**If on skin:** Wash with plenty of soap and water. Get medical attention if symptoms persist.

**If in eyes:** Flush with plenty of water. Call a physician if irritation persists.

**If inhaled:** Remove to fresh air if symptoms of cholinesterase inhibition appear. If not breathing, give artificial respiration. Get medical attention.

**Note to physician: Chlorpyrifos** is a cholinesterase inhibitor affecting the central and peripheral nervous systems and producing cardiac and respiratory depression. **Antidote:** Administer atropine sulphate in large doses. TWO to FOUR mg intravenously or intramuscularly as soon as cyanosis is overcome. Repeat at 5 to 10 minute intervals until signs of atropinization appear. 2-PAM chloride is a pharmacological antidote and may be administered as an adjunct to, but not a substitute for atropine, which is symptomatic and often lifesaving antidote. DO NOT GIVE MORPHINE OR TRANQUILIZERS. At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Continued absorption of **Chlorpyrifos** may occur and relapse may occur after initial improvement; VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS.

**Environmental Hazards**

This pesticide is toxic to birds, fish and aquatic invertebrates. Birds feeding in treated areas may be killed. Clean up spilled product to reduce exposure to wildlife. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water.

**Note: See specific use directions for Personal Protective Equipment (PPE) required for application of this product.**

**USER SAFETY RECOMMENDATIONS**  
Wash thoroughly with soap and water after handling. Before removing gloves wash them with soap and water. Remove contaminated clothing and wash clothing before reuse. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Follow the manufacturer's instruction for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

leaf 21

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying. Do not formulate this product into other end-use products. Not for use on plants grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior plantscapes, ornamental gardens or parks, or on golf courses or lawns and grounds.

**Storage and Disposal**

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

**Storage:** Store in original container in secured dry storage area. Prevent cross-contamination with other pesticides or fertilizers. Do not store above 122°F for extended periods of time. Preferred storage is above 32°F. Storage below 32°F may result in solidification. If warmed to above 32°F, product will return to original form. Freezing does not adversely affect this product. If container is damaged or spill occurs, use product immediately or dispose of product and damaged container as indicated below.

**Storage for Dilutions:** Dilutions of Cyren 2E XL are sensitive to crystal formations when exposed to freezing, or near freezing temperatures, e.g. temperatures below 35°F, for extended periods of time. Therefore, dilutions allowed to stand overnight should be stored at temperatures above 40°F.

**Pesticide Disposal:** Excess pesticide resulting from the use of this product may be disposed of on site according to label directions or at an approved waste disposal facility.

**Container Disposal:** Do not reuse empty container. Triple rinse, wrap container and put in trash.

**GENERAL INFORMATION**

Cyren 2E XL is an emulsifiable concentrate designed to have a lower odor and reduced acute exposure toxicity than older EC formulations. It is labeled for use as a spray to control various pests in and around residential and nonresidential buildings and structures, on various modes of transport, and on turf, ornamental plants, and fruit, nut, and citrus trees not grown for sale or commercial production.

**GENERAL PEST CONTROL - INDOORS**

**Directions for General Use Indoors**

Cyren 2E XL is intended to be mixed with water and applied as a crack and crevice and spot treatments with pressurized sprayers or other equipment suitable for applying insecticides to localized areas. Oil dilutions for certain uses are acceptable. The active ingredient in this product can provide effective residual control of pests listed on this label. To minimize airborne particles, spray pressure should not exceed 30 psi at the nozzle tip.

**PPE for General Use Indoors**

- Wear eye protection when making overhead applications
- To avoid breathing spray mist during application in confined areas, wear a mask or respirator of a type recommended by NIOSH for filtering spray mists

**Handling Procedures for General Use Indoors**

Adults, children, or pets should not contact treated surfaces until spray has dried. Before spraying, remove pets and cover aquaria, i.e., fish bowls, and turn off air pump. Do not apply where electrical short circuits could occur. Do not use indoors as a space spray or in fogging equipment.

### Treatment Sites

When used in accordance with label directions, Cyren 2E XL may be applied in and around residential and nonresidential buildings and structures including residential kitchens and all types of food handling establishments and vehicles. This product can be applied to walls, floors, ceilings, in and around cabinets, between, behind and beneath equipment and appliances, around floor drains, windows, eaves, wall voids, and door frames, around plumbing, sinks and other possible pest harborage sites. Permitted areas of use include, but are not limited to:

- |                             |                        |
|-----------------------------|------------------------|
| apartment buildings         | industrial buildings   |
| bakeries                    | kitchens               |
| bottling facilities         | laboratories           |
| breweries                   | malls                  |
| cafeterias                  | mausoleums             |
| crawl spaces                | mobile and motor homes |
| food manufacturing plants   | offices                |
| food processing plants      | restaurants            |
| food service establishments | schools                |
| granaries and grain mills   | stores                 |
| hospitals                   | warehouses             |
| hotels                      | wineries               |
| houses                      | vehicles               |

### Dosage Rates

Applications of 0.25% to 0.5% Cyren 2E XL can be made depending on pest species and conditions of premises. See "Specific Indoor Use Directions" for additional information.

### Mixing Directions

To make a 0.25% water based spray, mix 1 1/3 fl oz of Cyren 2E XL per each gallon of spray. To make a 0.5% water based spray, mix 2 2/3 fl oz of Cyren 2E XL per each gallon of spray. A stable emulsion of Cyren 2E XL can be formed by first adding approximately one-half the water to a spray tank followed by adding the proper amount of Cyren 2E XL. Close the tank and shake vigorously for 5 to 10 seconds. To avoid excess foam, slowly add remaining water.

**Tank Mixing:** Unless prohibited by a product's label, users, at their own discretion can tank mix pesticides currently labeled for similar use patterns. **It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for physical compatibility prior to tank mixing.**

For flushing action and/or quick knockdown, a properly labeled synergized pyrethrins, pyrethroid, or other product may be tank mixed. Do not tank mix this product with products containing dichlorvos (DDVP).

### Application Methods

This product may be applied indoors as crack and crevice and spot treatments. Treat where pests are found or normally occur. Except as noted under "Food Handling Establishments", applications can be made in 7 day intervals. If necessary, Cyren 2E XL may be applied after 2 days from last treatment (call back treatments), but such use should be limited to once per month.

**Crack and Crevice Applications:** Use a lower pressure system with a pinpoint or variable pattern nozzle to apply the spray mixture to areas such as: floors, cracks, and crevices in and around baseboards, walls, expansion joints, areas around water and sewer pipes, and voids formed by equipment or appliances.

If utilizing equipment such as Actsiol® or Micro-Injector®, insert tip into crack, crevice or wall opening actuate the release of product for only 1 to 5 seconds and then fill void with a continuous flow of air, being extremely careful to only apply in void.

**Spot Applications:** Use a low pressure system with a fan type nozzle to uniformly apply spot treatments in and around cupboards and between, beneath and behind equipment or appliances. Cyren 2E XL may be applied as a spot treatment for control of ticks and carpet beetles. **Note:** Thoroughly ventilating treated areas following treatments can reduce potential odors and speed drying. Ventilation in buildings with closed air circulating systems can be improved by adjusting ventilation systems to include outside air.

**Cabinet Interiors:** When treating interiors of cabinets containing food or food utensils, remove or otherwise protect such items from contact with spray. Allow spray to dry before returning food or food utensils to treated cabinets. Prevent the above items from directly contacting treated surfaces. Shelf liners or similar material can provide adequate protection from treated surfaces. Thoroughly wash dishes, food utensils or food-containing surfaces with soap and water if they are directly exposed to this product.

**Food Handling Establishments:** Cyren 2E XL may be applied in both food and nonfood areas of all types of food-handling establishments, i.e., food service, food processing and food manufacturing establishments. This includes, but is not limited to, restaurants, grocery stores, bakeries, bottling plants, canneries, and grain mills. See "Treatment Sites" for a more complete but not exhaustive listing. **Note:** Applications of this product within food handling areas are limited to spot and crack and crevice treatments. Applications can be applied in 7 day intervals in restaurants and similar food service establishments and applied in 14 day intervals in other types of food handling establishments. If necessary, Cyren 2E XL may be applied after 2 days from last treatment (call back treatments), but such use should be limited to once per month.

#### Indoor Pests Controlled by Cyren 2E

ants (1)	firebrats
beetles	fleas
boxelder bugs	flour beetles
(or other true bugs)	(Confused)
brown dog ticks (2)	(Red)
carpet beetles (3)	(Sawtoothed)
centipedes	Indian meal moths
clover mites	Mediterranean flour moths
cockroaches (4)	millipedes
(American)	rice weevils
(Asian)	silverfish
(Brownbanded)	scorpions
(German)	sowbugs
(Oriental)	spiders
(Smokybrown)	ticks
crickets	and other insect pests
earwigs	

Numbers refer to "Specific Indoor Use Directions".

#### Specific Indoor Use Directions

- **Ants** may be controlled by treating ant trails and wherever else these pests may find entrance; for example, around doors and windows.
- For the control of **brown dog ticks**, thoroughly apply spray to infested areas, such as cracks and crevices, along baseboards, windows and door frames, and areas of floor and floor coverings where these pests may be present. Old bedding should be replaced or thoroughly washed. Use a 0.5% spray. **DO NOT TREAT PETS WITH THIS PRODUCT. Humans or pets should not contact treated surfaces for a minimum of 4 hours and until spray has dried.**
- For the control of **carpet beetles**, thoroughly apply the spray to rugs, carpets, along baseboards and edges of carpeting, under carpeting, rugs and furniture, in closets and on shelving, and wherever else these insects are seen or suspected. Use a 0.5% spray. **Humans or pets should not contact treated surfaces for a minimum of 4 hours and until spray has dried.**
- **Cockroaches** can be controlled by making crack and crevice, and spot treatments. Treat where insects are found or normally occur including, but not limited to floors, cracks and crevices in walls, along and behind baseboards, around plumbing, floor drains and other utility installations, beneath and behind sinks, cabinets or other fixtures. Applications within food handling areas are limited to spot and crack and crevice treatments.



9/21

## GENERAL PEST CONTROL - PERIMETER TREATMENTS

### Directions for Perimeter Treatments

Cyren 2E XL is intended to be mixed with water and applied outdoors with pressurized sprayers as a general surface spray.

### PPE for Perimeter Treatments

- Wear eye protection when making overhead applications.

### Handling Procedures for Perimeter Treatments

Adults, children, or pets should not contact treated surfaces until spray has dried.

Keep out of fish pools and other bodies of water.

Do not treat vegetable gardens.

Do not allow livestock to graze in treated areas.

Do not feed treated grass cuttings (hay) or seed screenings to livestock, nor use treated hay for livestock bedding.

### Treatment Sites

When used in accordance to label directions Cyren 2E XL may be applied to and around outside surfaces of residential and nonresidential buildings and structures. Permitted areas of use include, but are not limited to:

crawl spaces	landscape timbers
decks	patios
driveways	refuse dumps
eaves	storage sheds
fences	walkways
foundations	walls
garages	window and door frames

**Note: Phytotoxicity:** Environmental factors and varietal differences may affect phytotoxic expression. In situations where phytotoxicity potential is of concern, it is recommended that a small group of plants be sprayed and observed for 7 to 10 days to determine phytotoxic potential before treating large numbers of those plants.

### Dosage Rates

Applications of 0.03% to 0.5% Cyren 2E XL can be made depending on pest species and method of application. See "Application Methods" for additional information.

### Mixing Directions

To make a 0.03% water based spray, add 1 2/3 fl oz Cyren 2E XL per 10 gallons of spray. To make a 0.5% water based spray add 2 2/3 fl oz Cyren 3E XL per each gallon of spray.

A stable emulsion of Cyren 2E XL can be formed by first adding approximately one-half the water to a spray tank followed by adding the proper amount of Cyren 2E XL. Close the tank and shake vigorously for 5 to 10 seconds. To avoid excess foam, slowly add remaining water.

**Tank Mixing:** Unless prohibited by a product's label, users, at their own discretion can tank mix pesticides currently labeled for similar use patterns. **It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for physical compatibility prior to tank mixing.**

For flushing action and/or quick knockdown, a properly labeled synergized pyrethrins, pyrethroid, or other product may be tank mixed. Do not tank mix this product with products containing dichlorvos (DDVP).

### Application Methods

This product may be applied outdoors as a general surface spray. Treat where pests are found or normally occur.

**Low Volume Directed Sprays:** Application of low volume, high concentration (about 0.5%) sprays can quickly reduce localized heavy pest infestations on outside surfaces. Use a low pressure system with a pinpoint or variable pattern nozzle, such as a 1 gallon hand pump sprayer, and apply the spray mixture to specific areas such as cracks and crevices along driveways, walkways, patios, windows and door frames or other areas where insects may congregate or can gain entrance to the structure.

**High Volume Broadcast Sprays:** Application of high volume, low concentration (0.03% - 0.12%) sprays, such as with power spraying equipment, can help prevent infestation of buildings by reducing pests in outdoor areas. Longer residual is achieved at the higher rates (about 0.12%). To make a 0.03% water based spray, mix 8 fl oz of Cyren 2E XL per 50 gallons of water. To make a 0.12% dilution, mix 32 fl oz of Cyren 2E XL per 50 gallons of water. This type of treatment provides more thorough coverage over large areas than low volume directed sprays. Treat by applying spray mixture directly to areas such as junctions of soil and structural walls, along base of fences, and under eaves. Apply as a coarse spray at the rate of about 10 gallons spray mixture per 1000 square feet. Thoroughly and uniformly wet the treated area.

### Pests Controlled by Perimeter Treatments of Cyren 2E

ants	elm leaf beetles
bees	(adults)
beetles	fire ants (1)
boxelder bugs	fleas
(or other true bugs)	flies
carpenter ants	hornets
centipedes	millipedes
clover mites	mosquitoes
cockroaches	pillbugs
(American)	scorpions (2)
(Asian)	sowbugs
(Brownbanded)	spiders
(German)	springtails
(Oriental)	ticks
(Smokybrown)	wasps
crickets	yellowjackets
earwigs	other outdoor insects

Numbers refer to "Specific Outdoor Use Directions".

### Specific Use Directions for Perimeter Treatments

- **Fire ant mounds** may be controlled by applying Cyren 2E XL as a drench. Dilute 2 fl oz per 4 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding areas to a 2 foot diameter. For best results, apply in cool weather, 65 to 80°F, or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.
- **Scorpions** may be controlled by removing accumulations of lumber, firewood and other materials serving as harborage sites. Before stacking firewood or lumber, apply Cyren 2E XL as a localized spray to surfaces immediately below such materials. Broadcast sprays outdoors may assist in reducing pests migrating from surrounding areas.

11 of 21

## GENERAL CONTROL OF WOOD-INFESTING INSECTS

### **Directions for General Use to Control Wood-Infesting Insects**

Cyren 2E XL is intended to be mixed with water and applied as a general surface or localized injection treatment with pressurized sprayers or other equipment suitable for applying insecticides to localized areas. Oil dilutions for certain uses are acceptable.

### **PPE for Control of Wood-Infesting Insects**

- Wear eye protection when making overhead applications
- To avoid breathing spray mist during application in confined areas, wear a mask or respirator of a type recommended by NIOSH for filtering spray mists

### **Handling Procedures to Control Wood-Infesting Insects**

Adults, children, or pets should not contact treated surfaces until spray has dried.

Cover or remove exposed foods before treatment.

Before spraying, remove pets and cover aquaria, i.e., fish bowls, and turn off air pump.

Do not apply where electrical short circuits could occur.

Do not use in structures housing animals which are intended for or which produce products to be used for food purposes, i.e., poultry houses.

Thoroughly ventilating treated areas following broadcast treatments can reduce potential odors and speed drying. Ventilation in buildings with closed air circulating systems can be improved by adjusting ventilation systems to include outside air.

### **Treatment Sites**

When used in accordance to label directions Cyren 2E XL can be applied to residential and nonresidential buildings and structures for control of wood-infesting insects. Permitted areas of use include, but are not limited to:

- wood surfaces
- voids and channels in damaged wood
- gaps between wooden members
- wall voids
- junctions between wood and foundation

### **Dosage Rates**

Applications of 0.5% to 1.0% Cyren 2E XL can be made depending on pest species and method of application. Expect residual control at higher rates. See "Specific Use Directions For Control of Wood-Infesting Insects" for additional information.

### **Mixing Directions**

To make a 0.5% water based spray, add 2 2/3 fl oz Cyren 2E XL per each gallon of spray mixture. To make a 1.0% water based spray mix add 5 1/3 fl oz Cyren 2E XL per each gallon of spray mixture.

A stable emulsion of Cyren 2E XL can be formed by first adding approximately one-half the water to a spray tank followed by adding the proper amount of Cyren 2E XL. Close the tank and shake vigorously for 5 to 10 seconds. To avoid excess foam, slowly add remaining water.

**Tank Mixing:** Unless prohibited by a product's label, users, at their own discretion can tank mix pesticides currently labeled for similar use patterns. **It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be run to check for physical compatibility prior to tank mixing.**

For flushing action and/or quick knockdown, a properly labeled synergized pyrethrins, pyrethroid, or other product may be tank mixed. Do not tank mix this product with products containing dichlorvos (DDVP).

### **Application Methods**

This product may be applied either as a coarse spray or by brushing onto targeted surfaces. Equipment capable of delivering a coarse, low pressure (about 20 psi) spray is recommended for treatment of large or overhead areas. Inaccessible areas such as wall voids can be treated by injecting the spray mixture

12/21

under low pressure (about 20 psi) through drilled openings. Use sufficient amount of spray dilution to cover the area to the point of wetness, but avoid applying to runoff.

If utilizing equipment such as Actsiol® or Micro-Injector®, insert tip into crack, crevice, channels in damages wood or wall opening actuate the release of product for only 1 to 5 seconds and then fill void with a continuous flow of air, being extremely careful to only apply in void.

**Overhead Areas:** It is recommended that, when spraying overhead interior living areas of residential buildings, surfaces below areas being treated be covered with plastic sheeting or other material which could be disposed of by placing in trash.

**Wood-Infesting Insects Controlled by Cyren 2E XL**

- Beetles (1)
  - (Anobiidae)
  - (Bostrichidae)
  - (Cerambycidae)
  - (Lyctidae)
- Carpenter ants and other wood-infesting ants (2)
- Carpenter bees
- Termites (3)

Numbers refer to "Specific Use Directions for Control of Wood-Infesting Insects".

**Specific Use Directions for Control of Wood-Infesting Insects**

- **Beetles** may be controlled by applying spray mixture to infested areas, or areas where infestation are likely to occur. This includes but is not limited to wood surfaces, voids and channels in damaged wood, in spaces between wooden members of a structure, and junctions between wood and foundations. Use the following guidelines to determine appropriate rates of application.

New Wood, (typically less than 10 years of age) apply at about 1 gallon of dilution per 150 square feet.  
Old Wood, (typically greater than 10 years of age) apply at about 1 gallon of dilution per 100 square feet.

- **Wood-Infesting ants** may be controlled by applying spray mixture around doors and windows, cracks or crevices, or other areas where ants may enter, crawl, or hide.

Primary colonies are typically found outside through an exterior inspection. Correction of sanitation and structural deficiencies or landscape modifications may be necessary for effective control.

- **Termites** can be treated by applying spray mixture to infested areas, or areas where infestations are likely to occur. This includes, but is not limited to wood surfaces, voids and channels in damaged wood, in spaces between wooden members of a structure, and junctions between wood and foundations.

This treatment is intended to kill localized infestations of workers and winged reproductive forms or aerial colonies of termites and to prevent infestation for a temporary period. This application is not intended as a substitute for soil treatments.

**GENERAL PEST CONTROL - TURF, ORNAMENTALS, AND FRUIT, NUT, AND CITRUS TREES**

**General Information**

Cyren 2E XL is an emulsifiable concentrate for use to control pests injurious to turf, ornamentals, and fruit, nut, and citrus trees. The pests controlled are noted in accompanying tables. Cyren 2E XL is compatible with insecticides, miticides and fungicides commonly recommended except for alkaline materials such as Bordeaux mixture and lime. A small amount of spray mixture should be made to check for compatibility before a large volume of spray is mixed.

**PPE for Application to Turf, Ornamentals, and Fruit, Nut, and Citrus Trees**

- Long-sleeved shirt and long pants
- Chemically-resistant gloves and footwear

13 of 21

### Handling Procedures

Adults, children, or pets should not contact treated surfaces until spray has dried.  
 Keep out of fish pools and other bodies of water.  
 Do not treat vegetable gardens.  
 Do not allow livestock to graze in treated areas.  
 Do not feed treated grass cuttings (hay) or seed screenings to livestock nor use hay for livestock bedding.  
 Chemigation: Do not apply this type of product through any type or irrigation system.  
 Fruit, nut, and citrus trees: See precautionary statements and restrictions in this section of the label.  
 It is always recommended that a small jar compatibility test using proper proportions of chemicals and water be mixed to check for physical compatibility prior to tank mixing.

### Turf and Other Outdoor Uses

Use Cyren 2E XL to control the pests in the following table by application at the recommended rates. Dilute Cyren 2E XL in water and apply using suitable application equipment. For best results, turf should be moist at the time of treatment.  
 JH product may be tank mixed. Do not tank mix this product with products containing dichlorvos (DDVP).

Pest		Amount of Cyren 2E XL per	
		1000 sq. ft.	Acre
Ants	Gnats		
Amyworms (Such as: Beet, Fall, Yellowstriped)	Grasshoppers	1 ½ fl oz	2 qt
Centipedes	Greenbug aphids		
Chiggers (1)	Green June beetle grubs		
Chinch bugs	Leafhoppers		
Crickets	Lucerne moth		
Cutworms	Millipedes		
Deer ticks (2)	Mites (Such as: Clover, Bermudagrass stunt, Winter grain)		
Earwigs	Mosquitoes (4)		
European crane fly larvae	Pillbugs		
Fiery skipper	Sod webworms (lawn moths) (5)		
Fire ants (foraging workers)	Sowbugs		
Fire ants (mounds) (3)	Ticks (1)		
Fleas			
Billbug adults (Such as: Bluegrass, Denver, Hunting) (6)		1 ½ - 3 fl oz	2 - 4 qt
Annual bluegrass weevil ( <i>Hyperodes</i> ) (7)		3 fl oz	4 qt
Black turfgrass atenioides adults (8)			
Mole crickets (9)			
Mole crickets (10)		3 - 4 ½ fl oz	4 - 6 qt
White grubs (Such as: Black turfgrass atenioides, European chafer, Japanese, beetle larvae, and Northern and Southern masked chafers) (11)		3 - 6 fl oz	4 - 8 qt

14 of 21

### Specific Use Directions

1. Use Cyren 2E XL for area control of ticks and chiggers infesting non-cropland areas such as turf and grassy areas, roadsides, footpaths and trails, picnic and camping sites, parks and other recreational areas where these pests are present and create a nuisance or a possible public health problem. Do not allow public use of treated areas during application or until spray has dried. Apply Cyren 2E XL insecticide in water at a rate of 1 pint per acre (1/3 fl oz per 1000 sq. ft.) Using a hydraulic sprayer, mist applicator, backpack sprayer, or other suitable hand or power operated spray equipment.
2. For control of deer ticks apply Cyren 2E XL in water at the rate of 2 quarts per acre or 1 1/2 fl oz per 1000 square feet. Treat low underbrush, turf, grassy areas, weeds, bushes, and ground surface and debris, using enough spray volume to obtain thorough coverage.
3. For individual fire ant mounds apply Cyren 2E XL as a drench. Dilute 2 fl oz per 4 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding areas to a 2 foot diameter. For best results, apply in cool weather, 65 - 80°F, or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.
4. Mosquitoes coming to rest on areas treated for control of turf pests will be controlled for varying periods of time after treatment depending on exposure of treated areas to weathering conditions.
5. For sod webworms, watering or mowing of the treated area should be delayed for 12 to 24 hours after treatment.
6. For billbugs, spray early in the season just prior to or coinciding with first appearance of adults as recommended by your local Agricultural Extension Service specialist.
7. To control annual bluegrass weevil, spray suspected problem areas in mid-April and again in mid-May, or as recommended by your local Agricultural Extension Service specialist.
8. For black turfgrass ataenius adults, spray early in the season as recommended by your local Agricultural Extension Service specialist. A repeat application may be needed 1 to 2 weeks later.
9. To control mole crickets in turfgrass, apply Cyren 2E XL through high pressure injection or other suitable subsurface placement application equipment. Depending on the application equipment used, follow the manufacturer's recommendation for calibration and the volume of spray per acre needed to provide control or, as recommended by your local Agricultural Extension Service specialist. For best results, apply when young nymphs are active.
10. To control mole crickets in turfgrass, apply Cyren 2E XL using broadcast or suitable hand-held application equipment. Application should be a minimum of 50 gallons of water per acre. Turf must be irrigated within 24 hours after treatment to wash the insecticide into the area of insect activity. Apply when early stage nymphs are active. To enhance effectiveness, spray late in the afternoon or early evening. Irrigate the turf during a 24 hour period both prior to and following the application to move mole crickets near the soil surface and wash the insecticide into the zone of insect activity.
11. For white grubs, spray when grubs are young and actively feeding near the soil surface, usually during late July and August, or as recommended by your local Agricultural Extension Service specialist. For best results, soil should be moist prior to treatment. For best results, immediately after spraying, irrigate the treated area with 1/2 to 1 inch water to wash the insecticide deep into the thatch or underlying soil.

### ORNAMENTALS (OUTDOOR)

Use Cyren 2E XL to treat flowers, shrubs, evergreens, vines, shade and flowering trees, and non-bearing fruit trees found to be infested with types of pests listed in the following tables. Dilute Cyren 2E XL with water according to directions given in the tables and apply using suitable hand or power operated spray equipment in a manner to provide complete and uniform coverage. Attempt to penetrate dense foliage, but avoid over-spraying to the point of excessive runoff. Uniform coverage is critical for effective insect and mite control.

Consult your State Agricultural Experiment Station or Extension Service specialist for application timing and other specific use.

**Note: Phytotoxicity:** Environmental factors and varietal differences may affect phytotoxic expression. In situations where phytotoxicity potential is of concern, it is recommended that a small group of plants be sprayed and observed for 7 to 10 days to determine phytotoxic potential before treating large numbers of those plants.

15 of 21

**Sucking Insects and Mites**

Pest	Amount of Cyren 2E XL per	
	1 gallon	100 gallons
Adelgids (Such as: Cooley and Eastern spruce galls, Pine bark)	1/6 - 1/3 fl oz	1 pt - 1 qt
Aphids (Such as: Apple, Balsam twig, Black pecan, Chrysanthemum, Cottonwood, Crape myrtle, Elm leaf, Melon, Peach, Rose, Spirea, White pine, Woolly, Woolly apple, Yellow pecan)		
Boxelder bugs		
Lace bugs (Such as: Hawthorn)		
Periodical cicada		
Plant bugs		
Psyllids		
Spittlebugs		
Thornbug		
Whiteflies		
Leafhoppers	1/3 fl oz	1 qt
Mealybugs (Such as: Citrus, Taxus)		
Mites (Such as: Clover, Red spider, Spruce spider, Southern red, Twospotted spider) (1)		
Thrips (exposed)		
Scale insects (Such as: Cottony cushion, Cottony maple, Dearness, Euonymus, Fletcher, Florida wax, Golden oak, Hemispherical, Lecanium, Magnolia, Oak kermes, Oak lecanium, Oyster shell, Pine needle, San Jose, Tea, White Birch) (2)	2/3 fl oz	2 qt

**Specific Directions**

1. For effective control of **spider mites** when large number of eggs are present, apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly hatched nymphs.
2. Time applications for control of **scale insects** when crawlers or first two stages of settled nymphs are present.

**Defoliators and Leafminers**

Pest		Amount of Cyren 2E XL per	
		1 gallon	100 gallons
Armyworms (Such as: Fall, Yellowstriped)	Oleander caterpillars	1/6 - 1/3 fl oz	1 pt - 1 qt
Bagworms (1)	Orange tortrix		
Cankerworms	Poplar tentmaker		
Catalpa sphinx	Puss caterpillars		
Elm spanworms	Rose chafers		
Fall webworms	Sawflies, exposed (Such as: European pine, Pine, Pin oak, Redheaded)		
Grasshoppers	Spring elm caterpillars		
Greenstriped mapeworms	Springtails		
Green fruitworms	Spruce budworms (Such as: Eastern, Western)		
Hornworms	Tent caterpillars (Such as Eastern, Forest, Western)		
Jackpine budworms	Walnut caterpillars		
Juniper webworms	Yellownecked caterpillars		
Katydid			
Leafrollers (3)			
Maple leafcutters (4)			
Oak skeletonizers			
Balsam gall midge	Mahogany webworms	1/3 fl oz	1 qt
Beet armyworms	Mimosa webworms		
Beetles (Such as: Fuller rose) (5)	Nantucket pine tip moth		
Browntail moth	Oakworms (California, Orangestriped, Redhumped)		
Cutworms	Pandora moth		
Cypress tip moth	Pitch pine tip moth		
Douglas-fir tussock moth	Redhumped caterpillars		
European pine shoot moth	Subtropical pine tip moth		
Gypsy moth (6)	Tussock moth		
Holly bud moth			
Beetles (Such as: Cottonwood leaf (7), Elm leaf, Flea, Willow leaf)		1/3 - 2/3 fl oz	1 - 2 qt
Leafminers		2/3 fl oz	2 qt
Needleminers (Such as: Jeffrey pine, Lodgepole, Spruce)			
Pine needle midge			
Rhododendron gall midge			



**Specific Directions**

1. For **bagworms**, treat when larvae are small and actively feeding.
2. For effective control of **fall webworms**, direct spray into web and immediately surrounding foliage.
3. For effective control of **leafrollers**, spray should be applied before leaves are tightly rolled.
4. For **maple leafcutter** on maple trees, apply spray to larvae as cases are being formed. Do not treat sugar maple trees intended for maple syrup production.
5. To reduce foliar feeding on twig and branches by **beetles**, applications should be made in the spring or early summer.
6. To control migrating and invading **gypsy moth** larvae, treat trunks and foliage.
7. For **cottonwood feat beetles**, spray larvae and adults infesting cottonwoods. Applications should be made when damaging beetle populations are developing or present.

**Borers, Bark Beetles, and Weevils**

Pest	Amount Cyren 2E XL per	
	1 gallon	100 gallons
Weevils (Such as: Black vine (1), Cranberry gridler (2), Pine reproduction, Yellow poplar)	1/3 fl oz	1 qt
Borers: Clearwig moths (Such as: Ash, Dogwood, Lesser Peachtree, Lilac, Oak, Peachtree, Rhododendron), Longhorned beetles (Such as: Cottonwood, Locust, Red oak), Metallic wood beetles (Such as: Bronze birch, Flatheaded appletree, Twolined chestnut) (3) Pales weevil adults Zimmerman pine moth	2/3 fl oz	2 qt
Northern pine weevil Pales weevil	2 fl oz	6 qt
Beetles (5) (Such as: Ambrosia, Anobiidae, Black turpentine, Blister, Cottonwood leaf, Elm leaf, European elm bark, Fuller rose, Japanese, June, Mountain pine, Native elm bark (6), Southern pine, Spruce, Western pine, Willow leaf)	5 1/3 fl oz	4 gal
Weevils (Such as: Northern pine, Pitch eating, Twig) (7)	10 2/3 fl oz	8 gal

**Specific Directions**

1. **Black vine weevils** are night feeders. Late afternoon spraying will maximize control.
2. For **cranberry girdler** larvae infesting Douglas-fir seedlings, direct spray at lower crown and stems following egg laying during summer and irrigate immediately after application to move insecticide into the top 1 to 2 inches of soil.
3. For **borers**, spray trunks and lower limbs of trees and shrubs when adults begin to emerge. For **peachtree borers**, spray flowering trees and shrubs of the genus Prunus as a trunk spray before newly-hatched larvae enter the trees and thoroughly wet all bark areas from ground level to scaffold limbs. Pheromone traps may aid in detection of adult clearwig moths. Consult your state Agricultural Experiment Station or Extension Service specialist for propr time to treat.
4. For control of **northern pine** and **pales weevil** larvae, apply as a cut stump spray or drench in winter or early spring.
5. For **preventive treatment**, spray the main trunk of trees in the early spring or when threat of attack exists from nearby infested trees. For **remedial treatment**, spray the main trunk of infested trees or logs before adult beetles begin to emerge.
6. To prevent **native elm bark beetles** from over-wintering in uninfested trees, apply using a dilution of 2 gal per 100 gallons of water (2 2/3 fl oz per gallon) as a spray to the bottom 9 feet of trunk. Wet the trunk thoroughly but do not spray to runoff. Care should be taken to apply the spray right to the base of the root flare. Applications can be made from spring to early fall. To reduce twig and branch feeding on trees deemed to be of high value, apply as a spray to the tree crown using a dilution of 2 gal per 100 gallons of water (2 2/3 fl oz per gallon). Application should be made in the spring or early summer using a sprayer that will give thorough coverage to the

- tree crown.
- 7. For pine seedlings, treat immediately after transplanting. Treat each seedling with enough spray to thoroughly wet the foliage and stem to the point of runoff.

**Ants, Termites, and Miscellaneous Pests**

Pests	Amount of Cyren 2E XL per	
	1 gallon	100 gallons
Ants Cockroaches (Such as: American, Asian, Brownbanded, German, Oriental, Smokybrown, Wood) Fire ants (foraging workers) Fire ants (mounds) (1) Sowbugs Springtails	1/3 fl oz	1 qt
Carpenter ants (2) Termites	5 1/3 fl oz	4 gal

**Specific Directions**

1. For individual fire ant mounds apply Cyren 2E XL as a drench. Dilute 2 fl oz per 4 gallons of water. Gently sprinkle 1 to 2 gallons of the diluted insecticide over the surface of each mound and surrounding areas to a 2 foot diameter. For best results, apply in cool weather, 65-80°F, or in early morning or late evening hours. Treat new mounds as they appear. Pressurized sprays may disturb the ants and cause migration, reducing product effectiveness.
2. If possible, locate carpenter ant nests and drench thoroughly.

**ORNAMENTALS (DORMANT SPRAY OF TREE PESTS)**

Use Cyren 2E XL as a dormant or delayed dormant spray at the rates indicated to control the listed insects. While Cyren 2E XL may be used without oil, oil is recommended to control additional pests such as European red mite.

For high volume (dilute) sprays (200 to 600 gallons of spray mixture per acre), tank mix the specified dosage with 1 to 2 gallons of a petroleum spray oil recommended for dormant use in 100 gallons of water. Spray the entire tree to runoff using suitable ground spray equipment.

For low volume (concentrate) sprays (less than 200 gallons of spray mixture per acre), use the same amount of Cyren 2E XL as for a dilute spray and apply in a manner that will ensure thorough coverage of the trees. Use oil as recommended by your State Agricultural Experiment Station or Extension Service specialist.

**Precautions:** Because cold, dry conditions may cause Cyren 2E XL plus oil to infuse trees resulting in bud damage or drop, do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated.

**Restrictions:** Make only one application during the dormant season. Do not allow meat or dairy animals to graze in treated areas.

19 of 21

Pest	Amount of Cyren 2E L per	
	1 gallon	100 gallons
Aphids (Such as: Mealy plum, Rosy apple, Woolly apple) Borers (Such as: Peach twig) Cutworms (Such as: Climbing) Leafrollers (Such as: Obliquebanded, Pandemis) Pear psylla adults Scale insects (Such as: San Jose)	1/6 - 1/3 fl oz	1 pt - 1 qt

**FRUIT, NUT, AND CITRUS TREES**

Use Cyren 2E XL to treat **almond, apple, cherry, filberts, nectarine, peach, pecan, plum, walnut and citrus trees or tree fruit** (such as: **grapefruit, lemon, orange**) not grown for commercial consumption of fruit by spraying to the point of runoff. When treating citrus trees only, a petroleum spray oil recommended for use on citrus trees may be added to spray mixtures only at a rate of up to 1.8 gallons per 100 gallons of water to improve control of aphids, mealybugs, scale insects and thrips. Treat when insects become a problem or in accordance with the local spray schedule recommended by your State Extension Service specialist.

**Precautions:** Do not apply as a foliar spray to **sweet cherries** because contact of spray solution with leaves may result in premature leaf drop. Observe local use recommendations for tank mix combinations especially with applications of Cyren 2E XL plus spray oil. Do not apply Cyren 2E XL in combination with oil to **walnuts**. Dry or cold conditions may cause Cyren 2E XL plus oil to infuse trees resulting in bud damage or drop; do not apply until winter rains or irrigation has replenished soil moisture such that bark and twigs are not desiccated. Do not apply when trees are stressed by drought.

**Restrictions:**

**Almonds, Filberts, Walnuts:** Make only one dormant/delayed dormant spray application and no more than three foliar spray applications on **almonds** per season, one dormant/delayed dormant spray application and no more than two foliar spray applications on **walnuts** per season, and no more than three foliar spray applications on **filberts** per season. Do not apply within 14 days of harvest.

**Apples:** Rate applied must not exceed 2/3 fl oz per gallon or 2 qt per 100 gallons. Make no more than 8 applications per season. Do not apply last treatment within 28 days before harvest or apply last two treatments closer than 21 days apart.

**Citrus (Such as: Grapefruit, Lemon, Orange):** Rate applied must not exceed 1/3 fl oz per gallon or 1 qt per 100 gallons. Do not apply to flowering trees. Do not apply when temperature exceeds 95°F. Do not apply more than 2 applications per fruit year. Do not make a second application within 30 days of the first application. Do not pick fruit for consumption until 21 days after application.

**Nectarines, Peaches (trunk sprays only):** Do not allow spray to contact fruit. Make only one application per season. Do not apply within 14 days of harvest.

**Pecans:** Rate applied must not exceed 2/3 fl oz per gallon or 2 qt per 100 gallons. Make no more than 5 applications per season. Do not apply within 28 days of harvest.

**Sour cherries:** Make no more than 8 applications per season. Do not apply within 14 days of harvest.

**Sweet cherries (trunk and lower limb sprays only):** Rate applied must not exceed 2/3 fl oz per gallon or 2 qt per 100 gallons. Avoid spray contact with foliage (leaves) since premature leaf drop may result. Make only 3 applications per year. Do not apply within 6 days of harvest.

Pest		Amount of Cyren 2E XL per	
		1000 sq. ft.	Acre
Aphids (Such as: Apple, Black cherry, Black pecan, Filbert, Rosy apple, Woolly apple, Yellow pecan)	Mites (Such as: Citrus rust, European red, Pecan leaf scorch, Twospotted spider) (2)	1/3 - 2/3 fl oz	1 - 2 qt

2021

Apple Maggot	Navel orange worm		
Borers (Such as: American plum, Dogwood, Lesser peachtree, Pacific flatheaded, Peach twig, Peachtree, Shothole)	Oriental fruit moth		
Cherry fruit fly	Pecan nut casebearer		
Climbing cutworm	Pecan weevil		
Codling moth	Periodical cicada		
European apple sawfly	<i>Phylloxera</i> sp		
European corn borer	Plum curculio		
Eyespotted bud moth	Potato leafhopper		
Fall webworm	Rose chafer		
Filbert worm	Scale insects (Such as: European fruit lecanium, San Jose, Walnut)		
Grasshoppers (Such as: Lubber) (1)	Spittlebug		
Green Fruitworm	Spotted tentiform leafminer		
Hickory shuckworm	Stinkbug		
Katydids	Tarnished plant bug		
Leaf rollers and tiers (Such as: Avocado leafroller, Filbert leafroller, Fruit tree leafroller, Obliquebanded leafroller, Omnivorous leafteir, Orange Redbanded leafroller, Variegated leafroller)	Thrips (Such as: Citrus)		
Lepidopterous larvae	Tufted apple budmoth		
Lesser appleworm	Walnut husk fly		
<i>Lygus</i> sp.	Western tussock moth		
Mealybugs	White apple leafhopper		
Mineola Moth	Winter moth		
Scale insects (Such as: Black scale, Brown soft scale, California red scale, Long scale, Purple scale, Snow scale)		2/3 - 1 1/3 fl oz	2 - 4 qt

**Note: Rate applied to citrus must not exceed 1/3 fl oz per gallon or 1 qt per 100 gallons. Rate applied to apples, pecans, or sweet cherries must not exceed 2/3 fl oz per gallon or 2 qt per 100 gallons.**

**Specific Directions**

1. **Lubber grasshoppers** must be controlled when they are small (less than 1 inch in length) by direct contact with spray.
2. For effective control of **spider mites** when large numbers of eggs are present, apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly hatched nymphs.

21 of 21

**WARRANTY DISCLAIMER**

Cheminova warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. CHEMINOVA MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

**INHERENT RISKS OF USE**

It is impossible to eliminate all risks associated with the use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornados, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Cheminova or the seller. All such risks shall be assumed by Buyer.

**LIMITATION OF REMEDIES**

The exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at Cheminova's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
- 2.- Replacement of amount of product used.

Cheminova shall not be liable for losses or damages resulting from handling or use of this product unless Cheminova is promptly notified of such loss or damage in writing. In no case shall Cheminova be liable for consequential or incidental damages or losses.

The terms of Warranty Disclaimer above and this limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Cheminova or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

Cyren is a trademark of Cheminova Agro.  
Actisol is a registered trademark of AgrEvo.  
Micro-Injector is a registered trademark of Whitmire Micro-Gen.

9/J6/9