



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Biopesticides and Pollution Prevention Division (7511M)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

87946-1

Date of Issuance:

12/23/2025

NOTICE OF PESTICIDE:

☒ Registration

☐ Reregistration

(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

CINNEX

Name and Address of Registrant (include ZIP Code):

Sym-Agro, Inc.  
c/o Pyxis Regulatory Consulting Inc.  
535 Dock St., Suite 211  
Tacoma, WA 98402

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Biopesticides and Pollution Prevention 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 under the Federal Insecticide, Fungicide, and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the U.S. Environmental Protection Agency. In order to protect health and the environment, the Administrator, on his or her 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 the 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 unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration or registration review of your product when EPA requires all registrants of similar products to submit such data.

Signature of Approving Official:

Gina Burnett, Senior Regulatory Advisor  
Biochemical Pesticides Branch  
Biopesticides and Pollution Prevention Division (7511M)  
Office of Pesticide Programs

Date:

12/23/2025

2. The alternate brand names: CINNEX T&O, CINNEX POST HARVEST, CINTERRA, CINTERRA T&O, CINTERRA POST HARVEST, CINNEX SOIL, CINNEX ST, CINTERRA SOIL, and CINTERRA ST have been added to the registration, and our records have been updated accordingly.
3. Make the following labeling change before you release this product for shipment:
  - Revise EPA Registration Number to read, "EPA Reg. No. 87946-1."
4. Submit one (1) copy of the final printed labeling for the record before you release this product for shipment.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by EPA. If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should EPA find or if it is brought to our attention that a website contains statements or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6. A stamped copy of the labeling is enclosed for your records. Please also note that the record for this product currently contains the following acceptable Confidential Statement of Formula (CSF):

- Basic CSF dated July 26, 2024

If you have any questions, please contact Menyon Adams by phone at (202) 566-1604 or via email at [adams.menyon@epa.gov](mailto:adams.menyon@epa.gov).

Sincerely,



Gina Burnett, Senior Regulatory Advisor  
Biochemical Pesticides Branch  
Biopesticides and Pollution  
Prevention Division (7511M)  
Office of Pesticide Programs

Enclosure

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

# {CINNEX}

{Alternate Brand Names:}

{CINNEX T&O}	{CINNEX POST HARVEST}	{CINTERRA}	{CINTERRA T&O}	{CINTERRA POST HARVEST}
{CINNEX SOIL}	{CINNEX ST}		{CINTERRA SOIL}	{CINTERRA ST}

{Note to reviewer: the above alternate brand names will match the appropriate sublabel listed below. For example, CINNEX T&O may be used for sublabel C, Professional Landscape, Greenhouse, and Turf and Ornamental Use, and CINNEX ST may be used for Sublabel E, Seed Treatment.}

{EPA REG. NO. 87946-[R]}

## {MASTER LABEL}

{including:}

{SUBLABEL A: GREENHOUSE AND AGRICULTURE FIELD USE}

{SUBLABEL B: HOME & GARDEN USE}

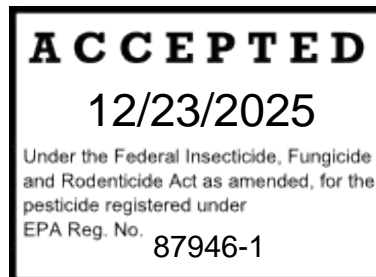
{SUBLABEL C: PROFESSIONAL LANDSCAPE, GREENHOUSE, AND TURF AND ORNAMENTAL USE}

{SUBLABEL D: FRUIT & TUBER POST HARVEST TREATMENTS}

{SUBLABEL E: SEED TREATMENT}

{BASE LABEL}

{OPTIONAL MARKETING STATEMENTS}



{EPA APPROVAL DATE}

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

## **{SUBLABEL A: GREENHOUSE AND AGRICULTURE FIELD USE}**

### **{BOOKLET FRONT PANEL}**

# **CINNEX**

Fungicide – Insecticide –Algaecide

{CINNEX SOIL} {CINTERRA} {CINTERRA SOIL}

[FOR USE ON] [GREENHOUSE] [AND] [OUTDOOR] [FOOD CROPS,] [ORNAMENTALS,] [FLOWERS,]  
[TREES,] [SHRUBS,] [AND] [PLANTS][SEED TREATMENT][.]

#### **ACTIVE INGREDIENT:**

**w/w%**

Cinnamaldehyde (CAS No. 104-55-2) ..... 22.50%

**OTHER INGREDIENTS:** ..... 77.50%

**TOTAL:** ..... 100.00%

Contains 1.92 pounds of cinnamaldehyde per gallon.

**KEEP OUT OF REACH OF CHILDREN**

## **CAUTION**

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything 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 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a> .	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

**EPA Reg. No.:** 87946-[R]

**Net Contents:** [Gallons] [Gal[s]][.]

**EPA Establishment No.:**

**[Batch No.][Lot No.]**

**Manufactured by:** Sym-Agro, Inc.  
111 South Court Street Suite 206  
Visalia CA, 93291

**[Distributed by:]**

{Company name and address}

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION.** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirts and long pants
- Shoes plus socks
- Waterproof gloves

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

**ENGINEERING CONTROLS**

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**

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment wash water or rinsate.

**PHYSICAL OR CHEMICAL HAZARDS**

**Combustible.** Do not use or store near heat or open flame. Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State and Tribe, consult the State/Tribal 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), notification to workers, and restricted-entry interval. The requirements in this box 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
- Shoes plus socks
- Waterproof gloves

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

### PRODUCT INFORMATION

**CINNEX** is a broad-spectrum biopesticide emulsifiable concentrate fungicide and insecticide.

**Product Modes of Action:** **CINNEX** is a soft formula with a high content of a specific active aldehyde. **CINNEX** has a knock down and eradicated effect against many pests and fungal diseases.

**CINNEX** is used for the prevention, control and suppression of soil-borne and foliar diseases on labeled outdoor field grown agricultural uses, including vegetables, herbs, small fruits, berries and fruit and nut trees, greenhouse uses and use on ornamentals. **CINNEX** contains the active ingredient, cinnamaldehyde. **CINNEX** is most effective when applied prior to the onset of disease. Use **CINNEX** in combination and/or rotation with chemical fungicides to enhance disease control. Also for use in greenhouse plug production and hydroponics operations.

**CINNEX** has multiple modes of action in preventing, controlling and suppressing plant diseases. It is effective against fungal diseases by disrupting the cell membranes as well as inhibiting the growth, attachment, and penetration of pathogenic spores into the plant tissue. Disease control is achieved by both direct contact and fumig activity.

**CINNEX** controls target pests on contact, affecting adults, juvenile and has strong ovicidal activity. The product acts on the pest via repellency, softening of the exoskeleton resulting in dehydration, and suffocation. The active substance also has a possible interference with glucose uptake or utilization.

The use of **CINNEX** is compatible with the principles of Integrated Pest Management (IPM) and programs that attempt to minimize disease resistance to fungicides. **CINNEX** can be applied alone or in combination and/or rotation with chemical fungicides as a tool for IPM (Integrated Pest Management) in agricultural crops, greenhouse use, and ornamentals. Unlike single-site mode of action fungicides which are at risk from disease resistance, **CINNEX** has a multi-site mode of action, and may be used to delay or prevent the development of resistance to single site fungicides. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of **CINNEX** in IPM and resistance management programs.

**CINNEX** can be used in biocontrol programs as it is soft toward beneficial predatory predators and bees. When introducing beneficial predators, allow 5-7 days for them to acclimate to field condition before making **CINNEX** application.

#### Restrictions:

- Do not apply to wilted or otherwise stressed plants, or to newly transplanted material prior to root establishment.
- Do not apply when the temperature is >90°F.
- Do not mix **CINNEX** with Captan, Bordeaux mixtures, oxidizing agents, including bleach, or highly alkaline or acid products as they will destabilize the product and can cause unacceptable phytotoxicity and/or reduced effectiveness on target pests.

## APPLICATION INSTRUCTIONS

For optimal performance spray product as soon as possible when pests are expected or when pests first appear. For foliar applications, apply **CINNEX** in sufficient spray volume and with adequate spray pressure to ensure complete and thorough coverage of all plant surfaces including both the top and bottom of leaves. Avoid excessive runoff. Best results can be obtained following 2-3 applications made at 5-10 day intervals. When pest pressure is heavy or plant canopy is dense, use higher rates and increase spray frequency. Spraying in the morning or evening hours will provide the best results.

For the control of insect pests, start applications prior to typical population thresholds.

**Mixing and Application Instructions:** Shake well before using. **CINNEX** has been found to be compatible with most commonly used insecticides, fungicides and miticides. Add required amount of **CINNEX** to a clean spray tank with at least one-half of the water to be sprayed. Agitate the mixture thoroughly and then fill the tank with remaining water and continue agitation. Always use this product promptly after mixing with water and do not let tank mix sit for any extended period.

To avoid problems, conduct a compatibility test before using this product in a tank mix with other pesticides. Check physical compatibility first, then mix the correct proportion of products in a small jar. Then, test tank mix combinations for phytotoxicity on a sample of plants prior to use. Due to the wide variation in climatic conditions, cultural practices, and other factors, the user assumes full responsibility for any crop damage or other liability resulting from the use of **CINNEX** in a tank mix combination.

**CINNEX** is designed for application without additional wetting agents and spreaders. Use adjuvants with **CINNEX** to improve control of insect pests in situations where achieving uniform plant coverage is difficult, including closed crop canopy, dense foliage and penetration into waxy leaf surfaces or when rainfall may remove spray deposits.

**pH:** It is advisable to use **CINNEX** in a pH water solution adjusted to neutral or slightly acid (around 6 - 6.5).

Do not combine **CINNEX** with pesticides, surfactants or fertilizers for application through chemigation equipment unless prior experience has shown the combination physically compatible, effective and non-injurious under conditions of use. **CINNEX** has not been fully evaluated for compatibility with all adjuvants or surfactants. It is advisable to conduct a spray compatibility test if a mixture with adjuvants or surfactants is planned.

Application Type	Spray Preparation
Row Crops:	Apply in a minimum of 10 gallons per acre.
Trees & Vines:	Apply in a minimum of 15 gallons per acre.
All Other Crops:	Apply in a minimum of 20 gallons per acre. Use 1 to 2 gallons per 1000 square feet.
Turf, Outdoor, Nursery, and Greenhouse Plants:	Apply in a minimum of 20 gallons per acre.
Aircraft, Ultra Low Volume and Electrostatic Equipment (All Crops):	Apply at 32-45 fl oz per 100 gallons of water. Apply in a minimum of 10 gallons per acre and a maximum of 20 gallons per acre.
[California Only—All Application Types]	[For best results, coverage typically requires a minimum of 30 gallons of total spray volume per acre. Higher volumes will be required for larger perennial crops.]

**Ground Application:** Apply **CINNEX** as a foliar spray by ground. Mix 32-64 fl oz of **CINNEX** in 100 gallons of water and apply at a sufficient spray volume to ensure complete coverage. For low volume applications, where less than 100 gallons of water is used, apply at a rate of 32-64 fl oz per 100 gallons of spray solution.

[In California, apply **CINNEX** as a foliar spray by ground using most commonly-used ground application equipment, including, tractor-mounted boom, airblast high clearance, hose-end, backpack, and other pressurized sprayers, hose-end or hand-held sprayers, foggers or mistblowers, water wheel and other drench applicators. Mix 16-56 fl oz of **CINNEX** in 100 gallons of water and apply in a minimum of 30 gallons of total spray volume gallons per acre and at a sufficient spray volume to ensure complete coverage. Higher volumes will be required for larger perennial crops.]

**Aerial Application:** Apply **CINNEX** as a foliar spray by air. **CINNEX** can be applied by fixed or rotary winged aircraft in a minimum of 10 gallons of total spray volume gallons per acre. Mix 32-45 fl oz of **CINNEX** in 100 gallons of water and apply at a sufficient spray volume to ensure complete coverage. For low volume applications, where less than 100 gallons of water is used, apply at a rate of 32-64 fl oz per 100 gallons of spray solution. Take standard precautions to minimize spray drift.

[In California, **CINNEX** can be applied by fixed or rotary winged aircraft. Mix 16-56 fl oz of **CINNEX** in 100 gallons of water and apply in a minimum of 30 gallons of total spray volume gallons per acre and at a sufficient spray volume to ensure complete coverage. Higher volumes will be required for larger perennial crops. Take standard precautions to minimize spray drift.]

**Soil Treatment:** Apply **CINNEX** by soil drench, banded soil drench, shanked-in, soil injected, or in-furrow spray to protect against certain soil-borne diseases and insects. **CINNEX** can be applied by the following methods:

Soil Drench: Apply **CINNEX** at a concentration of 32-128 fl oz per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application during or shortly after transplant to control soil-borne diseases. Multiple drench applications can be made on a 10-14 day schedule.

[In California, apply **CINNEX** at a concentration of 16-56 fl oz per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application during or shortly after transplant to control soil-borne diseases. Multiple drench applications can be made on a 10-14 day schedule.]

Banded Soil Drench: Mix 32-128 fl oz of **CINNEX** in 100 gallons of water. Apply as a banded soil drench, or chemigate via microsprinkler, drip or other irrigation system in sufficient water to move product into the root zone. Begin applications during early shoot growth and continue applications on a 4- to 6-week interval until fall.

[In California, mix 16-56 fl oz of **CINNEX** in 100 gallons of water. Apply as a banded soil drench, or chemigate via microsprinkler, drip or other irrigation system in sufficient water to move product into the root zone. Begin applications during early shoot growth and continue applications on a 4- to 6-week interval until fall.]

Shanked-In and Injected: Shank or inject **CINNEX** at a concentration of 64-256 fl oz per 100 gallons of water into the soil alone, or with most types of liquid nutrients.

[In California, shank or inject **CINNEX** at a concentration of 16-56 fl oz per 100 gallons of water into the soil alone, or with most types of liquid nutrients.]

In-Furrow: Apply **CINNEX** at planting as an in-furrow spray. Mix 32-64 fl oz of **CINNEX** in 100 gallons of water and apply at 5-15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.

[In California, apply **CINNEX** at planting as an in-furrow spray. Mix 16-56 fl oz of **CINNEX** in 100 gallons of water and apply at 30 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.]

**Chemigation:** Apply this product only through drip (trickle), sprinkler (center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, hand move), flood (basin), furrow, or border irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

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.

**Spray Preparation:** First prepare a suspension of **CINNEX** in a mix tank. Fill tank  $\frac{1}{2}$  to  $\frac{3}{4}$  the desired amount of water. Start mechanical or hydraulic agitation. Add the required amount of **CINNEX**, and then the remaining volume of water. Then set the sprinkler to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start sprinkler and uniformly



inject the suspension of **CINNEX** into the irrigation water line so as to deliver the desired rate per acre. Inject the suspension of **CINNEX** with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. Direct any questions on calibration to your State Extension Service Specialists, to equipment manufacturers or other experts.

#### Chemigation Systems Connected to Public Water Systems:

- 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.
- Chemigation systems connected to public water systems must contain a functional, reduced pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the 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.
- 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 contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.

#### Sprinkler Chemigation:

- 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 pump.
- 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 stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Do not apply when wind speed favors drift beyond the area intended for treatment.
- Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply when soils are moderately moist. Use volumes that thoroughly wet the foliage and/or soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.

#### Floor (Basin), Furrow and Border Chemigation:

- Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.
- Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- 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 pump.
- 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 stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.

#### Drip (Trickle) Chemigation:

- 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 pump.
- 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 inter-locking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- Dilute the product in water following the label mixing directions. It may be premixed in a supply tank with water, fertilizer, or other appropriate tank-mixed agricultural chemicals. Agitation is necessary. Apply to moderately moist soils. Use volumes that thoroughly wet the soil but that do not cause significant runoff or excessive drip from pots. Application should be continuous in sufficient water to apply the application rate evenly to the entire treated area.

## **TARGETED PESTS: INSECTS [†]**

**COLEOPTERA**, such as: **beetles**, **grubs** and **weevils** including Asian long-horned beetle, bark beetles, black vine weevil, Colorado potato beetle, elm bark beetle, European chafer, flea beetles, Japanese beetle, June beetle, leaf beetles, Mexican bean beetle, Northern masked chafer, rose chafer, Southern masked chafer and twig girders.

**DIPTERA**, such as: **flies\*** including Caribbean fruit fly, cherry maggots, crane fly, fungus **gnat**, Hessian fly, oriental fruit fly, Mediterranean fruit fly, marsh crane flies, melon fly, shore fly, spotted wing drosophila, and walnut husk fly; **leafminers** including citrus leafminers and serpentine leafminers.

\*Not intended for use on public health pests.

**HEMIPTERA AND HOMOPTERA**, such as: **true bugs** including boxelder bugs, chinch bugs, lygus bugs and stink bug; **lacebugs**; **leafhoppers** including grape leafhopper, spittlebug, potato leafhopper and variegated leafhopper; **mealy bugs** including apple mealy bugs, citrus mealy bugs, grape mealy bugs; **whiteflies** including greenhouse

whitefly, silverleaf whitefly, sweet potato whitefly and woolly whitefly; **aphids** including apple aphid, green peach aphid, melon aphid, pea aphid, potato aphid and rose aphid; **psyllids** including pear psyllids; **scales** including black scale, brown soft scale, California red scale, coffee scale, olive scale, San Jose scale, and cottony cushion scale.

**HYMENOPTERA**, such as: **sawflies**\* including European sawflies, pear sawflies, red-headed pine sawflies, yellow-headed pin sawflies.

\*Not intended for use on public health pests.

**LEPIDOPTERA**, such as: **moths** including European pine shoot moth, pine tip moth and Tussock moth; **leafrollers** including blueberry leafroller, filbert leafroller, fruitree leafroller, citrus leafminers, grape leafroller, oblique banded leafroller, omnivorous leafroller; **cutworms** including black cutworm and citrus cutworm; **caterpillars and loopers** including bagworms, budworms, cabbage looper, canker worms, case bearers, caseworms, corn earworm, diamondback moth, fruit worms, grapeleaf skeletonizer, gypsy moth, hornworms, imported cabbageworm, navel orangeworm, soybean looper, spruce budworm, tent caterpillar, tip moths, tent caterpillars, tobacco budworm, tobacco hornworm, tomato pinworm and tussock moth; **armyworms** including beet armyworm, fall armyworm, lawn armyworm, southern armyworm and yellow striped armyworm; **webworms** and **leaf perforators**.

**ORTHOPTERA**, such as: **crickets**; **grasshoppers**; **locusts**.

**THYSANOPTERA**, such as: **thrips** including citrus thrips, flower thrips, gladiolus thrips, onion thrips, [*thrips palmi*][melon thrips] and Western flower thrips.

[†] [Not registered for use by California.]

## [TARGETED PESTS—California Only]

Use **CINNEX** in a foliar spray to control, suppress or repel soft bodied pests, and piercing and sucking pests, including\*:

**Aphids**, including: cotton aphid, green peach aphid, sharpshooter aphid.

**Ants**.

**Armyworms, Caterpillars and Loopers**, including: apple maggot adults, alfalfa caterpillar, alfalfa weevil larvae, armyworms, blueberry maggot, cabbage looper, caterpillars, caterpillar larvae, fruit worms, tent caterpillar, tobacco horn worm, tomato pin worm.

**Borers**, including: [*hypothenemus hampei*][coffee berry borer], long horned stem borer, peach twig borer, stem borer.

**Flies**, including: fungus gnats, walnut husk fly.

**Leafhoppers**, including: *Empoasca* spp., *Graphocephala* spp., *Macrostelus* spp.

**Mealybugs**, including: [*Dysmicoccus brevipes*][mealybug], *Planococcus* spp., *Pseudococcus* spp.

**Moths**, including: codling moth, grape berry moth, *Heliothis* spp., *Lepidoptera* spp.

**Plant Bugs**, including: apple maggots, blueberry maggot, leafrollers, lygus bugs, San Jose scale, soft scales, squash bug.

**Psyllids**, including: *Bactericera* spp., *Cacopsylla* spp., [*Diaphorina citri*][Asian citrus psyllid].

**Scale Insects** [*Hemiptera* spp.].

**Thrips**, including: *Frankliniella* spp., *Heliothrips* spp., [*Scirtothrips citri*][California citrus thrips], *Thrips* spp.

**True Bugs**, including: boxelder bug, stink bug.

**Whiteflies**, including: *Bemisia* spp., *Dialeurodes* spp., *Trialeurodes* spp.

\*Not intended for use on public health pests.]

## TARGETED DISEASES<sup>[†]</sup>

Such as Alternaria leaf spot (*Alternaria* spp.), Anthracnose (*Elsinoe ampelina*), Black Mold (*Aspergillus niger*), Blue mold (*Penicillium* spp.), Botryosphaeria, Brown Rot (*Monilinia* spp.), Bulls Eye Rot (*Neofabraea* spp.), Cladosporium,

Dollar Spot, Downy Mildew, Early Bight (*Alternaria* spp.), Fusarium (*Fusarium oxysporum*), *Fusarium* spp., Gray Mold (*Botrytis* spp.), Green mold (*Penicillium digitatum*), Late Blight (*Phytophthora infestans*), Mucor Fruit Rot (*Mucor* spp.), Phomopsis Soft Rot (*Phomopsis* spp.), Phytophthora Root Rot (*Phytophthora* spp.), Powdery mildew, *Pythium* spp., *Rhizoctonia* spp., Rhizopus Fruit Rot (*Rhizopus* spp.), Rust (*Puccinia* spp.), Scab (*Venturia* spp.), Shot Hole (*Xanthomonas arboricola*), Sour Rot (*Geotrichum*), Sour Rot Complex, Stem End Rot (*Gnomonia comari*), *Verticillium* spp., White Mold (*Sclerotinia*).

OTHER: Algae, Algae Scum, Moss, Liverwort, Hornwort, and Pearlwort.

[†] [Not registered for use by California.]

## [TARGETED DISEASES—California Only

algae, algae scum, apple scab, botrytis, brown rot, dollar spot, downey mildew, hornworts, liverworts, moss, pearlworms, [pitch canker][*Fusarium subglutinans* f. sp. *pini*], powdery mildews, *Pythium* spp., *Rhizoctonia* spp., and rusts.]

## SPECIFIC CROP USE INFORMATION

### Foliar Application Use Rates[\*]

CINNEX	Use Rate Per 100 Gallons of Water			
	Standard Rate	High Pressure		Soil Treatment
	2 pints	3 pints	4 pints	4-16 pints
	32 fl oz	48 fl oz	64 fl oz	64-256 fl oz
Re-Treatment Interval (RTI)	5 - 10 days	5 - 7 days		14-60 days

[\*] [Not registered for use by California.]

### [Rate Chart—California Only

CINNEX	Use Rate Per 100 Gallons of Water			
	First Presence	Common Rate	High Pressure	
	1 pint	2 pints	3 pints	3.5 pints
	16 fl oz	32 fl oz	48 fl oz	56 fl oz
Re-Treatment Interval (RTI)	5 - 7 days	5 - 10 days		5 - 7 days

In those crops where water volume applications are up to 150 gallons per acre or more, it is advisable to use a dilution rate between 40-55 fl oz per 100 gallons.]

### Application Rates for Selected Crops

Use **CINNEX** to prevent, control and suppress a broad range of plant diseases, and pests.

CROPS – FIELD[†]	
<b>BERRIES</b> [(Crop Group 13-07)]	Amur river grape; aronia berry; bayberry; bearberry; bilberry; blackberry (including Andean blackberry, arctic blackberry, bingleberry, black satin berry, boysenberry, brombeere, California blackberry, Chesterberry, Cherokee blackberry, Cheyenne blackberry, common blackberry, coryberry, darrowberry, dewberry, Dirksen thornless berry, evergreen blackberry, Himalayaberry, hullberry, lavacaberry, loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, mora, mures deronce, nectarberry, Northern dewberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, Southern dewberry, tayberry, youngberry, zarzamora, and cultivars, varieties and/or hybrids of these), blueberry; highbush; blueberry; lowbush; buffalo currant; buffaloberry; che; Chilean guava; chokecherry; cloudberry; cranberry; currant, black; currant, red; elderberry; European barberry; gooseberry; grape; highbush cranberry; honeysuckle, edible; huckleberry; jostaberry; juneberry (Saskatoon

<b>CROPS – FIELD<sup>[†]</sup></b>	
	berry); kiwifruit, fuzzy; kiwifruit, hardy; lingonberry; maypop; mountain pepper berries; mulberry; muntries; native currant; partridgeberry; phalsa; pincherry; raspberry, black and red; riberry; salal; schisandra berry; sea buckthorn; serviceberry; strawberry; wild raspberry; cultivars; varieties; and/or hybrids of these.
<b>LEAFY VEGETABLES</b> [[Crop Group 4-16]]	amaranth, Chinese; amaranth, leafy; arugula; aster, Indian; blackjack; broccoli, Chinese (gai lon); broccoli raab; cabbage, abyssinian; cabbage, Chinese, bok choy; cabbage, seakale; cat's whiskers; cham-chwi; cham-na-mul; chervil, fresh leaves; chipilin; chrysanthemum, garland; cilantro, fresh leaves; collards; corn salad; cosmos; cress, garden; cress, upland; dandelion, leaves; dang-gwi, leaves; dillweed; dock (sorrel); dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; Hanover salad; huauzontle; jute, leaves; kale; lettuce, bitter; lettuce, head; lettuce, leaf; maca, leaves; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckthorn; primrose, English; purslane, garden; purslane, winter; radicchio (red chicory); radish, leaves; rape greens; rocket, wild; shepherd's purse; spinach; spinach, Malabar; spinach, New Zealand; spinach, tanier; Swiss chard; turnip greens; violet, Chinese, leaves; watercress; cultivars, varieties, and hybrids of these commodities.
<b>BRASSICA (COLE) LEAFY VEGETABLES</b> [[Crop Group 5-16]]	broccoli; brussels sprouts; cabbage; cabbage, Chinese (bok choy, Napa); cauliflower; cultivars, varieties, and hybrids of these commodities.
<b>BULB VEGETABLES</b> [[Crop Group 3-07]]	chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; Elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, great headed, bulb; garlic, Serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.
<b>CEREAL GRAINS AND COMMODITIES</b> [[Crop Group 15-22]]	amaranth, grain; amaranth, purple; baby corn; barley; buckwheat; buckwheat, tartary; canarygrass, annual; cañihua; chia; corn, field; corn, sweet; cram cram; fonio, black; fonio, white; grain sorghum (milo); huauzontle grain; Inca wheat; Job's tears; millet, barnyard; millet, finger; millet, foxtail; millet, little; millet, pearl; millet, proso; oat; oat, Abyssinian; oat, common; oat, naked; oat, sand; popcorn; Prince's feather; psyllium; psyllium, blond; quinoa; rice; rice, African; rye; teff; teosinte; triticale; wheat; wheat, club; wheat, common; wheat, durum; wheat, einkorn; wheat, emmer; wheat, macha; wheat, oriental; wheat, Persian; wheat, Polish; wheat, poulard; wheat, shot; wheat, spelt; wheat, timopheevi; wheat, vavilovi; wheat, wild einkorn; wheat, wild emmer; wheatgrass, intermediate; wild rice; wild rice, eastern; cultivars, varieties, and hybrids of these commodities.
<b>CITRUS FRUIT</b> [[Crop Group 10-10]]	Australian desert lime; Australian finger lime; Australian round lime; Brown River finger lime; calamondin; citron; citrus hybrids ( <i>Citrus</i> spp., <i>Eremocitrus</i> spp., <i>Fortunella</i> spp., <i>Microcitrus</i> spp., and <i>Poncirus</i> spp.); grapefruit; Japanese summer grapefruit; kumquat; lemon; lime; Mediterranean mandarin; Mount White lime; New Guinea wild lime; orange, sour; orange, sweet; pummelo; Russell River lime; Satsuma mandarin; sweet lime; Tachibana orange; Tahiti lime; tangelo; tangerine (mandarin); tangor; trifoliate orange; uniq fruit; cultivars, varieties and/or hybrids of these.
<b>CUCURBIT VEGETABLES</b> [[Crop Group 9]]	chayote (fruit); Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); <i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber); muskmelon (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon); pumpkin; squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini); squash, winter (includes

<b>CROPS – FIELD<sup>[†]</sup></b>	
	butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon;
<b>FRUITING VEGETABLES</b> [[Crop Group 8-10]]	African eggplant; bush tomato; cocona; currant tomato; eggplant; garden huckleberry; goji berry; groundcherry; martynia; naranjilla; okra; pea eggplant; pepino; pepper, bell and nonbell (chili pepper, cooking pepper, pimento, sweet pepper); roselle; scarlet eggplant; sunberry; tomatillo; tomato; tree tomato; cultivars, varieties and/or hybrids of these.
<b>GRASS, FODDER AND HAY</b> [[Crop Group 17]]	Forage, fodder, stover, and hay of any grass, <i>Gramineae/Poaceae</i> family (either green or cured) except sugarcane and those included in the cereal grains group, that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage.
<b>HERBS AND SPICES</b> [[Crop Group 19]]	allspice; angelica; anise (anise seed); anise, star; annatto (seed); balm (lemon balm); basil; borage; burnet; camomile; caper buds; caraway; caraway, black; cardamom; cassia bark; cassia buds; catnip; celery seed; chervil (dried); chive; chive, Chinese; cinnamon; clary; clove buds; coriander (cilantro or Chinese parsley, leaf); coriander (cilantro, seed); costmary; culantro (leaf); culantro (seed); cumin; curry (leaf); dill (dillweed); dill (seed); fennel (common); fennel, Florence (seed); fenugreek; grains of paradise; horehound; hyssop; juniper berry; lavender; lemongrass; lovage (leaf); lovage (seed); mace; marigold; marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram); mustard (seed); nasturtium; nutmeg; parsley (dried); pennyroyal; pepper, black; pepper, white; poppy (seed); rosemary; rue; saffron; sage; savory, summer and winter; sweet bay (bay leaf); tansy; tarragon; thyme; vanilla; wintergreen; woodruff; wormwood.
<b>LEGUME VEGETABLES</b> [[Crop Group 6]]	bean ( <i>Lupinus</i> spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin); bean ( <i>Phaseolus</i> spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean); bean ( <i>Vigna</i> spp., includes adzuki bean, asparagus bean, blackeye pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, southern pea, urd bean, yardlong bean); broad bean (fava bean); chickpea (garbanzo bean); guar; jackbean; lablab bean (hyacinth bean); lentil; pea ( <i>Pisum</i> spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea); pigeon pea; soybean; soybean (immature seed); sword bean.
<b>[MUSHROOMS]</b> <b>[EDIBLE FUNGI]</b>	Blewitt ( <i>Lepista nuda</i> ); Bunashimeji ( <i>Hypsizygus marmoratus</i> ); Chinese mushroom ( <i>Volvariella volvacea</i> ); Enoki ( <i>Flammulina velutipes</i> ); Hime-Matsutake ( <i>Agaricus blazei</i> ); Hirameola ( <i>Auricularia auricular</i> ); Maitake ( <i>Grifola frondosa</i> ); Morel ( <i>Morchella</i> spp.); Nameko ( <i>Pholiota nameko</i> ); Net Bearing ( <i>Dictyophora</i> ); Oyster mushroom ( <i>Pleurotus</i> spp.); Pom Pom ( <i>Hericium erinaceus</i> ); Reishi mushroom ( <i>Ganoderma lucidum</i> ); Rodman's agaricus ( <i>Agaricus bitorquis</i> ); Shiitake mushroom ( <i>Lentinula edodes</i> ); Shimeji ( <i>Tricholoma conglabatum</i> ); Stropharia ( <i>Stropharia</i> spp.); Truffle ( <i>Tuber</i> spp.); White button mushroom ( <i>Agaricus bisporous</i> ); White Jelly Fungi ( <i>Tremella fuciformis</i> ).
<b>NONGRASS ANIMAL FEED</b> [[Crop Group 18]]	alfalfa; bean, velvet; clover; kudzu; lespedeza; lupin; sainfoin; trefoil; vetch; vetch, crown; vetch, milk.
<b>OTHER</b>	coffee; cacao; cavalo broccolo; Chinese mustard cabbage (gai choy); chrysanthemum, edible-leaved; cotton; globe artichoke; hemp; hops; mustard spinach; peanut; soybean, spinach, vine; sugarcane; sunflower; tea; tobacco; water chestnut.
<b>POME FRUIT</b> [[Crop Group 11-10]]	apple; azarole; crabapple; loquat; mayhaw; medlar; pear, Asian; pear; quince, Chinese; quince; quince, Japanese; tejocote; cultivars, varieties and/or hybrids of these.
<b>ROOT AND TUBER</b>	arracacha; arrowroot; artichoke, Chinese; artichoke, Jerusalem; beet, garden;

<b>CROPS – FIELD<sup>[†]</sup></b>	
<b>VEGETABLE</b> [[Crop Group 1]]	beet, sugar; burdock, edible; canna, edible (Queensland arrowroot); carrot; cassava, bitter and sweet; celeriac (celery root); chayote (root); chervil, turnip-rooted; chicory; chufa; dasheen (taro); ginger; ginseng; horseradish; leren; parsley, turnip-rooted; parsnip; potato; radish; radish, oriental (daikon); rutabaga; salsify (oyster plant); salsify, black; salsify, Spanish; skirret; sweet potato; tanier (cocoyam); turmeric; turnip; yam bean (jicama, manioc pea); yam, true.
<b>STALK, STEM AND LEAF PETIOLE VEGETABLES</b> [[Crop Group 22]]	agave; aloe vera; asparagus; bamboo, shoots; cardoon; celery; celery, Chinese; celtuce; fennel, Florence, fresh leaves and stalk; fern, edible, fiddlehead; fuki; kale, sea; kohlrabi; palm hearts (various species); prickly pear, pads; prickly pear, Texas, pads; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities.
<b>STONE FRUIT</b> [[Crop Group 12-12]]	apricot; apricot, Japanese; capulin; cherry, black; cherry, Nanking; cherry, sweet; cherry, tart; jujube, Chinese; nectarine; peach; plum; plum, American; plum, beach; plum, Canada; plum, cherry; plum, Chickasaw; plum, Damson; plum, Japanese; plum, Klamath; plum, prune; plumcot; sloe; cultivars, varieties, and/or hybrids of these.
<b>TREE NUTS</b> [[Crop Group 14-12]]	African nut-tree; almond; beechnut; Brazil nut; Brazilian pine; bunya; bur oak; butternut; cajou nut; candlenut; cashew; chestnut; chinquapin; coconut; coquito nut; dika nut; ginkgo; Guiana chestnut; hazelnut (filbert); heartnut; hickory nut; Japanese horse-chestnut; macadamia nut (bush nut); mongongo nut; monkey puzzle nut; monkey-pot; okari nut; pachira nut; peach palm nut; pecan; pequi; pili nut; pine nut; pistachio; sapucaia nut; tropical almond; walnut, black; walnut, English; yellowhorn; cultivars, varieties, and/or hybrids of these.
<b>TROPICAL FRUITS</b> [[Crop Group 23]] [[Crop Group 24]]	abiu; açai; acerola; achachairú; African plum; agritos; aisen; akee apple; almondetta; ambarella; apak palm; appleberry; arazá; arbutus berry; atemoya; avocado; avocado, Guatemalan; avocado, Mexican; avocado, West Indian; babaco; bacaba palm; bacaba-de-leque; bacury; bael fruit; banana; banana, dwarf; bayberry, red; bignay; bilimbi; binjai; biriba; borojó; breadfruit; breadnut; Burmese grape; cabeluda; cajou, fruit; cambucá; canistel; carandas-plum; carob; cashew apple; cat's-eyes; ceylon iron wood; ceylon olive; champedak; cherimoya; Cherry-of-the-Rio-Grande; Chinese olive, black; Chinese olive, white; chirauli-nut; ciruela verde; cocoplum; cupuacú; custard apple; date; Davidson's plum; desert-date; doum palm coconut; dragon fruit; durian; elephant-apple; etambe; false sandalwood; feijoa; fig; fragrant manjack; gooseberry, abyssinian; gooseberry, Ceylon; gooseberry, Indian; gooseberry, otaheite; governor's plum; granadilla; granadilla, giant; grumichama; guabiroba; guava; guava berry; guava, Brazilian; guava, cattley; guava, Costa Rican; guava, Para; guava, purple strawberry; guava, strawberry; guava, yellow strawberry; guayabillo; llama; illawarra plum; imbé; imbu; Indian-plum; ingá; jaboticaba; jackfruit; Jamaica-cherry; jambolan; jatobá; jelly palm; jujube, Indian; kaffir-plum; kakadu plum; kapundung; karanda; karuka; kei apple; kwai muk; langsai; lanjút; lemon aspen; longan; lucuma; lychee; mabolo; madras-thorn; mammy-apple; manduro; mangaba; mango; mango, horse; mango, Saipan; mangosteen; marang; marian plum; marmaladebox; matisia; mesquite; mombin, malayan; mombin, purple; mombin, yellow; mongongo, fruit; monkey-bread-tree; monkeyfruit; monos plum; monstera; mountain cherry; nance; natal plum; nicobar-breadfruit; noni; olive; paho; pandanus; papaya; papaya, mountain; passionflower, winged-stem; passionfruit; passionfruit, banana; passionfruit, purple; passionfruit, yellow; patauá; pawpaw, common; pawpaw, small-flower; peach palm, fruit; pelipisan; pequi; pequia; persimmon, American; persimmon, black; persimmon, Japanese; pineapple; pitahaya; pitaya; pitaya, amarilla; pitaya, roja; pitaya, yellow; pitomba; plantain; Plum-of-Martinique; pomegranate; pomerac; poshte; prickly pear, fruit; prickly pear, Texas, fruit; pulasan;

<b>CROPS – FIELD<sup>[†]</sup></b>	
	quandong; rambai; rambutan; rose apple; rukam; rumberry; saguaro; sapodilla; sapote, black; sapote, green; sapote, mamey; sapote, white; sataw; satinleaf; screw-pine; sea grape; sentul; sete-capotes; Sierra Leone-tamarind; silver aspen; soncoya; soursop; Spanish lime; star apple; starfruit; sugar apple; sun sapote; surinam cherry; tamarind; Tamarind-of-the-Indies; uvalha; velvet tamarind; wampi; water apple; water berry; water pear; wax jambu; white star apple; wild loquat; cultivars, varieties, and hybrids of these commodities.

<sup>[†]</sup> [Not registered for use by California.]

<b>[CROPS—CALIFORNIA ONLY]</b>	
<b>FRUITS, CITRUS AND NUT TREES</b>	almond, apple, apricot, cherry, crabapple, chestnut, filbert, grapefruit, kumquat, lemon, lime, mandarin, nectarine, orange, pecan, peach, pear, pistachio, plum, prune, quince, walnut.
<b>VEGETABLES: LEAFY, FRUITING AND CUCURBITS</b>	arugula, celery, chayote, [Chinese cabbage][boy choy], Chinese cucumber, citron melon, collards, cucumber, cucumber melon, eggplant, endive, escarole, greens (beets, China, dandelion, mustard, turnip), ground cherry, lettuce (head, leaf, romaine), melons (cantaloupe, crenshaw, honeydew, muskmelon, watermelon), okra, parsley, peppers, pumpkin, radicchio, spinach, squash, Swiss chard, tomato.
<b>VEGETABLES: BRASSICA (COLE), BULB, AND ROOT AND TUBER</b>	artichoke, broccoli, brussels sprouts, cabbage, Chinese cabbage, carrot, cauliflower, celeriac, celery, chicory, garden beet, garlic, ginger, ginseng, horseradish, kale, kohlrabi, leek, Napa cabbage, onion (dry blub), onion (green), parsnip, potato, pumpkin, radish, rutabaga, salsify, shallot, sugar beet, sweet potato, turnips.
<b>SMALL FRUITS, BERRIES, AND GRAPES</b>	blackberry, blueberry, boysenberry, cranberry, currant, grapes, guava, loganberry, raspberry, strawberry.
<b>FIELD CROPS: LEGUME VEGETABLES, CEREAL GRAINS AND FORAGE, AND GRASSES</b>	alfalfa, barley, beans, canola, chickpea, corn (field, sweet, popcorn), cotton, evening primrose, hops, jojoba, lentil, meadowfoam, millet, oat, peas, rice, rye, safflower, sorghum, soybean, sunflower, triticale, wheat, pasture (grasses and hay), silage, and any grass that will be fed to or grazed by livestock.
<b>HERBS AND SPICES</b>	basil, chives, cilantro, dill, mint (peppermint/spearmint), oregano, parsley, rosemary, sage, thyme.
<b>OTHER CROPS</b>	acerola, asparagus, avocado, banana, cacao, canistel, cardoni, carob, cherimoya, cocoa, coffee, date, fig, lychee, malanga, mamey sapote, mango, mushroom, olive, palm, papaya, passion fruit, peanut, persimmon, pineapple, pomegranate, sugarcane, tea, tobacco.]

<b>GREENHOUSE<sup>[†]</sup></b>	
<b>GREENHOUSE PRODUCTION</b>	Berries [(Crop Group 13-07)] Leafy Vegetables [(Crop Group 4-16)] Brassica (Cole) Leafy Vegetables [(Crop Group 5-16)] Bulb Vegetables [(Crop Group 3-07)] Cereal Grains and Commodities [(Crop Group 15-22)] Citrus Fruit [(Crop Group 10-10)] Cucurbit Vegetables [(Crop Group 9)] Fruiting Vegetables [(Crop Group 8-10)] Grass, Fodder and Hay [(Crop Group 17)] Herbs and Spices [(Crop Group 19)] Legume Vegetables [(Crop Group 6)] [Mushrooms] [Edible Fungi] Nongrass Animal Feed [(Crop Group 18)] Pome Fruit [(Crop Group 11-10)] Root and Tuber Vegetables [(Crop Group 1)]



	Stalk, Stem and Leaf Petiole Vegetables [(Crop Group 22)] Stone Fruit [(Crop Group 12-12)] Tree Nuts [(Crop Group 14-12)] Tropical Fruits [(Crop Group 23)] [(Crop Group 24)] Other: coffee; cacao; cavalo broccolo; Chinese mustard cabbage (gai choy); chrysanthemum, edible-leaved; cotton; globe artichoke; hemp; hops; mustard spinach; peanut; soybean, spinach, vine; sugarcane; sunflower; tea; tobacco; water chestnut.
<b>TRANSPLANT VEGETABLE PRODUCTION</b>	Leafy Vegetables [(Crop Group 4-16)] Brassica (Cole) Leafy Vegetables [(Crop Group 5-16)] Bulb Vegetables [(Crop Group 3-07)] Cucurbit Vegetables [(Crop Group 9)] Fruiting Vegetables [(Crop Group 8-10)] Legume Vegetables [(Crop Group 6)] Root and Tuber Vegetables [(Crop Group 1)] Stalk, Stem and Leaf Petiole Vegetables [(Crop Group 22)] Other: cavalo broccolo; Chinese mustard cabbage (gai choy); chrysanthemum, edible-leaved; globe artichoke; hops; mustard spinach; peanut; soybean, spinach, vine; water chestnut.

<sup>[†]</sup> [Not registered for use by California.]

<b>[GREENHOUSE—CALIFORNIA ONLY]</b>
flowers, herbs, ornamentals, spices, vegetables; greenhouse (glasshouse), structural or decorative surfaces, containers, pots or storage bins.]

ORNAMENTALS <sup>[†]</sup>	
CHRISTMAS TREES AND CHRISTMAS TREE PLANTATIONS	
ALL TYPES OF ORNAMENTAL TREES, SHRUBS, FLOWERS, BEDDING PLANTS AND OTHER ORNAMENTALS	Annuals and Perennials; Bedding Plants; Container Grown Plants; Deciduous Trees and Shrubs; Evergreen Trees and Shrubs; Foliage Plants; Golf Courses; Ground Covers; Palms; Potted Flowers; Tropical Foliage; Woody Ornamentals

<sup>[†]</sup> [Not registered for use by California.]

[ORNAMENTALS—CALIFORNIA ONLY	
Ornamentals, Turf, Lawns, Trees	Bare root stock, bedding plants, Christmas trees, container stock, flowers (including fresh cut), forest, golf courses, landscape trees, lawns, nursery trees, ornamental plants and shrubs, ornamental starts, ornamental trees, pine trees, shade trees, turf/turfgrass, vegetable and fruit starts.]

<b>STORAGE AND DISPOSAL</b>
<p>Do not contaminate water, food, or feed by storage or disposal.</p> <p><b>PESTICIDE STORAGE:</b> Store in a cool dry place inaccessible to children. Store in original container only. Keep container tightly closed when not in use.</p> <p><b>PESTICIDE DISPOSAL:</b> Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.</p> <p><b>CONTAINER HANDLING:</b>  <b>[Nonrefillable Plastic Containers (Capacity Equal to or Less Than 5 Gallons):]</b> Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.</p>

**[Nonrefillable Plastic Containers (Capacity Greater Than 5 Gallons):]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into formulation equipment or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

**[Nonrefillable Plastic Containers (e.g., Intermediate Bulk Containers [IBC]) (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down):]** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into formulation equipment and before final disposal using the following pressure rinsing procedure: Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure spray duration and/or spray volume. If the manufacturer's instructions are not available pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain pour or pump rinsate into formulation equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.

## WARRANTY

Sym-Agro, Inc. warrants that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. Buyers and users of this product assume the risk of any use contrary to such directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. To the extent consistent with applicable law, the Seller's liability for any breach of warranty shall not exceed the purchase price of the material as to which a claim is made.

To the extent consistent with applicable law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, or without the fault or negligence of the Seller, or from failure to follow the label.

[EPA APPROVAL DATE]

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

## **{SUBLABEL B: HOME & GARDEN USE}**

### **{BOOKLET FRONT PANEL}**

# **CINNEX**

Fungicide – Insecticide –Algaecide

{CINTERRA}

{One of the following options will be included on the final printed label indicating that the product is for home and garden use}

[FOR [HOMEOWNER] USE ON] [FOOD CROPS,] [ORNAMENTALS,] [FLOWERS,] [TREES,] [SHRUBS,] [AND] [PLANTS][SEED TREATMENT][.] [FOR] [HOME] [AND] [GARDEN] [USE][.]

[Not registered for use by California.]

#### **ACTIVE INGREDIENT:**

Cinnamaldehyde (CAS No. 104-55-2) ..... w/w% 22.50%

**OTHER INGREDIENTS:** ..... 77.50%

**TOTAL:** ..... 100.00%

Contains 1.92 pounds of cinnamaldehyde per gallon.

## **KEEP OUT OF REACH OF CHILDREN**

## **CAUTION**

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything 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 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a> .	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

**EPA Reg. No.:** 87946-[R]

**Net Contents:** [Gallons][Ounces][Gal[s]][Oz[s]][.]

**EPA Establishment No.:**

**[Batch No.:][Lot No.:]**

**Manufactured by:** Sym-Agro, Inc.  
111 South Court Street Suite 206  
Visalia CA, 93291

**[Distributed by:]**

{Company name and address}

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### ENVIRONMENTAL HAZARDS

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

### PHYSICAL OR CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. STOP! Read the label before using. Use only as directed on this label.

### HOW IT WORKS

**CINNEX** is a broad-spectrum biopesticide concentrate fungicide and insecticide for the prevention, control and suppression of soil-borne and foliar diseases on labeled food crops including vegetables, herbs, small fruits, berries and fruit and nut trees, turf, and ornamental plants. Use **CINNEX** in combination and/or rotation with chemical fungicides to enhance disease control.

### CINNEX APPLICATION

For best results, ensure spray coverage is uniform and complete. Adjust spray droplet size to maximize coverage, minimize drift, and allow direct contact with as many pathogens (insects, fungi) as possible. Use lower rates for light to moderate pest pressure and higher rates for heavy infestations.

**CINNEX** can be applied to crops at any time up to and including the day of harvest. Begin spraying when pests first appear; do not wait until plants are heavily infested. Repeat as needed every 5 days (minimum interval) to maintain desired level of control. There are no restrictions on the number of applications per year.

Always Follow These Directions: Apply in early morning or late afternoon. Spray directly onto pest(s) or pathogen(s). Apply before noticeable foliar damage occurs. Thorough spray coverage is essential for good pest control.

### HOW TO APPLY

**For the control of a variety of pests (scale, aphids and soft bodied insects, piercing and sucking pest, powdery mildew, botrytis and rusts, blights) use CINNEX as indicated in the following table.**

USE RATE: Mix 0.20 – 0.50 fl oz of **CINNEX** per gallon of water (25 – 60 fl oz per 100 gallons of spray solution).

Rate Conversion		
Rate / 100 Gal Spray Solution	Rate / 1 Gal Water	Tsp / 1 Gal Water
25 fl oz	0.20 fl oz	1.25
30 fl oz	0.25 fl oz	1.50
40 fl oz	0.30 fl oz	1.75
60 fl oz	0.50 fl oz	3

Begin spraying when insects first appear; do not wait until plants are heavily infested. Repeat as needed every 5 days (minimum interval) to maintain desired level of control. There are no restrictions on the number of applications per year. Use the higher rate and shorter intervals when pest pressure increases, or a severe infection has occurred.

**MIXING:** Dilute **CINNEX** with water and apply in pressurized hand-held sprayers, spray trigger bottles or hose-end sprayers. Partially fill the spray tank with clean water. Add the specified amount of **CINNEX** to the tank. Finish filling the tank to the desired volume to obtain the proper spray concentration. Shake the spray tank and use spray mixture immediately. Do not allow spray mixture to stand overnight or for prolonged periods.

Apply **CINNEX** to the point of saturation of the treated foliage. Good coverage and wetting is required. The amount of spray solution to apply will vary depending on the type of crop. Apply in sufficient water to achieve thorough coverage. Apply at the first sign of disease and repeat at 5-14 day intervals as needed.

#### **PRECAUTIONS:**

- Use with care on plants with tender tissue.
- This product cannot be mixed with any product containing a label prohibition against such mixing.
- Consult your dealer or distributor for specific advice.

#### **RESTRICTIONS:**

- Do not apply to wilted or otherwise stressed plants, or to newly transplanted material prior to root establishment.
- Do not apply when the temperature is >90°F.
- Do not exceed label dosage rate.
- **DO NOT MIX CINNEX WITH Captan, Bordeaux mixtures, oxidizing agents including bleach or highly alkaline or acid products as they will destabilize the product and can cause unacceptable phytotoxicity and/or reduced effectiveness on target pests.**

#### **WHERE TO APPLY**

##### **Apply to the following types of home and garden plants:**

Asparagus, beets, broccoli, Brussels sprouts, cabbage, carrots, cane fruit (raspberry, blackberry, etc.) cauliflower, celery, collards, cucumbers, edible-podded, grape, legume vegetables including: snap bean, wax bean, yard long bean, jack bean, edible-pod pea, snow pea, sugar snap pea; dried shelled beans and peas including: field bean, kidney bean, lima bean (dry), navy bean, pinto bean, adzuki bean, black-eyed pea, cowpea, mung bean, southern pea, lentil (dry); eggplant, grapes, herbs, horseradish, kale, lettuce, melons, mustard greens, onions, parsnips, pepper, potatoes, radish, rutabaga, salsify, squash (winter and summer), sweet potato, strawberry, tomatoes, turnip greens, and turnips.

Ornamentals-including annuals and perennials

Fruit and Nut Trees

Turf

#### **TARGETED PESTS: INSECTS**

**COLEOPTERA**, such as: **beetles**, **grubs** and **weevils** including Asian long-horned beetle, bark beetles, black vine weevil, Colorado potato beetle, elm bark beetle, European chafer, flea beetles, Japanese beetle, June beetle, leaf beetles, Mexican bean beetle, Northern masked chafer, rose chafer and Southern masked chafer and twig girders.

**DIPTERA**, such as: **flies**\* including Caribbean fruit fly, cherry maggots, crane fly, fungus **gnat**, Hessian fly, oriental fruit fly, Mediterranean fruit fly, marsh crane flies, melon fly, shore fly, spotted wing drosophila, and walnut husk fly; **leafminers** including citrus leafminers and serpentine leafminers.

\*Not intended for use on public health pests.

**HEMIPTERA AND HOMOPTERA**, such as: **true bugs** including boxelder bugs, chinch bugs, lygus bugs and stink bug; **lacebugs**; **leafhoppers** including grape leafhopper, spittlebug, potato leafhopper and variegated leafhopper; **mealy bugs** including apple mealy bugs, citrus mealy bugs, grape mealy bugs; **whiteflies** including greenhouse

whitefly, silverleaf whitefly and sweet potato whitefly and woolly whitefly; **aphids** including apple aphid, green peach aphid, melon aphid, pea aphid, potato aphid and rose aphid; **psyllids** including pear psyllids and **scales** including black scale, brown soft scale, California red scale, coffee scale, olive scale, San Jose scale, and cottony cushion scale.

**HYMENOPTERA**, such as: **sawflies**\* including European sawflies, pear sawflies, red-headed pine sawflies, yellow-headed pin sawflies.

\*Not intended for use on public health pests.

**LEPIDOPTERA**, such as: **moths** including European pine shoot moth, pine tip moth and Tussock moth; **leafrollers** including blueberry leafroller, filbert leafroller, fruitree leafroller, citrus leafminers, grape leafroller, oblique banded leafroller, omnivorous leafroller; **cutworms** including black cutworm and citrus cutworm; **caterpillars and loopers** including bagworms, budworms, cabbage looper, canker worms, case bearers, caseworms, corn earworm, diamondback moth, fruit worms, grapeleaf skeletonizer, gypsy moth, hornworms, imported cabbageworm, navel orangeworm, soybean looper, spruce budworm, tent caterpillar, tip moths, tent caterpillars, tobacco budworm, tobacco hornworm, tomato pinworm and tussock moth; **armyworms** including beet armyworm, fall armyworm, lawn armyworm, southern armyworm and yellow striped armyworm; **webworms** and **leaf perforators**.

**ORTHOPTERA**, such as: **crickets**; **grasshoppers**; **locusts**.

**THYSANOPTERA**, such as: **thrips** including citrus thrips, flower thrips, gladiolus thrips, onion thrips, [*thrips palmi*][melon thrips] and Western flower thrips.

## TARGETED DISEASES:

Such as Alternaria leaf spot (*Alternaria* spp.), Anthracnose (*Elsinoe ampelina*), Black Mold (*Aspergillus niger*), Blue mold (*Penicillium* spp.), Botryosphaeria, Brown Rot (*Monilinia* spp.), Bulls Eye Rot (*Neofabraea* spp.), Cladosporium, Dollar Spot, Downy Mildew, Early Bight (*Alternaria* spp.), Fusarium (*Fusarium oxysporum*), *Fusarium* spp., Gray Mold (*Botrytis* spp.), Green mold (*Penicillium digitatum*), Late Blight (*Phytophthora infestans*), Mucor Fruit Rot (*Mucor* spp.), Phomopsis Soft Rot (*Phomopsis* spp.), Phytophthora Root Rot (*Phytophthora* spp.), Powdery mildew, *Pythium* spp., *Rhizoctonia* spp., Rhizopus Fruit Rot (*Rhizopus* spp.), Rust (*Puccinia* spp.), Scab (*Venturia* spp.), Shot Hole (*Xanthomonas arboricola*), Sour Rot (*Geotrichum*), Sour Rot Complex, Stem End Rot (*Gnomonia comari*), *Verticillium* spp., Walnut Blight, White Mold (*Sclerotinia*).

OTHER: Algae, Algae Scum, Moss, Liverwort, Hornwort, and Pearlwort

**CINNEX** controls a variety of the most common plant foliar diseases and insects when used on a preventative schedule.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool dry place inaccessible to children. Store in original container only. Keep container tightly closed when not in use.

**PESTICIDE DISPOSAL AND CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling, if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

## WARRANTY

Sym-Agro, Inc. warrants that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. Buyers and users of this product assume the risk of any use contrary to such directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. To the extent consistent with applicable law, the Seller's liability for any breach of warranty shall not exceed the purchase price of the material as to which a claim is made.

To the extent consistent with applicable law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, or without the fault or negligence of the Seller, or from failure to follow the label.

[EPA APPROVAL DATE]

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

**{SUBLABEL C: PROFESSIONAL LANDSCAPE, GREENHOUSE, AND TURF AND ORNAMENTAL USE}**

**{BOOKLET FRONT PANEL}**

# CINNEX

Fungicide – Insecticide –Algaecide

{CINNEX T&O} {CINNEX SOIL} {CINTERRA} {CINTERRA T&O} {CINTERRA SOIL}

[FOR USE [IN][ON]] [GREENHOUSES] [CONTAINER POTS AND STORAGE BINS] [AND] [PROFESSIONAL] [LANDSCAPE], [ORNAMENTALS,] [FLOWERS,] [TREES SHRUBS] [AND] [PLANTS] [TURF][.]

**ACTIVE INGREDIENT:**

Cinnamaldehyde (CAS No. 104-55-2) ..... w/w% 22.50%

**OTHER INGREDIENTS:** ..... 77.50%

**TOTAL:** ..... 100.00%

Contains 1.92 pounds of cinnamaldehyde per gallon.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

FIRST AID	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything 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 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a> .	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

**EPA Reg. No.:** 87946-[R]

**Net Contents:** [Gallons][Ounces] [Gal[s]][Oz[s]][.]

**EPA Establishment No.:**

**[Batch No.:][Lot No.:]**

**Manufactured by:** Sym-Agro, Inc.  
111 South Court Street Suite 206  
Visalia CA, 93291

**[Distributed by:]**

{Company name and address}



## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirts and long pants
- Shoes plus socks
- Waterproof gloves

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

### ENGINEERING CONTROLS

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

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment wash water or rinsate.

### PHYSICAL OR CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State and Tribe, consult the State/Tribal agency responsible for pesticide regulation.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

### PRODUCT INFORMATION

**CINNEX** is a broad-spectrum biopesticide emulsifiable concentrate fungicide and insecticide.

**Product Modes of Action:** **CINNEX** is a soft formula with a high content of a specific active aldehyde. **CINNEX** has a knock down and eradicated effect against many pests and fungal diseases.

**CINNEX** is used for the prevention, control and suppression of soil-borne and foliar diseases in and on greenhouses, professional landscapes, container pots and storage bins, ornamental flowers, trees, shrubs and plants, and turf. **CINNEX** contains the active ingredient, cinnamaldehyde. **CINNEX** is most effective when applied prior to the onset of disease. Use **CINNEX** in combination and/or rotation with chemical fungicides to enhance disease control.

**CINNEX** has multiple modes of action in preventing, controlling and suppressing plant diseases. It is effective against fungal diseases by disrupting the cell membranes as well as inhibiting the growth, attachment, and penetration of pathogenic spores into the plant tissue. Disease control is achieved by both direct contact and fumig activity.

**CINNEX** controls target pests on contact, affecting adults, juvenile and has strong ovicidal activity. The product acts on the pest via repellency, softening of the exoskeleton resulting in dehydration, and suffocation. The active substance also has a possible interference with glucose uptake or utilization.

The use of **CINNEX** is compatible with the principles of Integrated Pest Management (IPM) and programs that attempt to minimize disease resistance to fungicides. **CINNEX** can be applied alone or in combination and/or rotation with chemical fungicides as a tool for IPM (Integrated Pest Management) in agricultural crops, greenhouse use, and ornamentals. Unlike single-site mode of action fungicides which are at risk from disease resistance, **CINNEX** has a multi-site mode of action, and may be used to delay or prevent the development of resistance to single site fungicides. Consult with your Federal or State Cooperative Extension Service representatives for guidance on the proper use of **CINNEX** in IPM and resistance management programs.

**CINNEX** can be used in biocontrol programs as it is soft toward beneficial predatory predators and bees. When introducing beneficial predators, allow 5-7 days for them to acclimate to field condition before making **CINNEX** application.

#### **Restrictions:**

- Do not apply to wilted or otherwise stressed plants, or to newly transplanted material prior to root establishment.
- Do not apply when the temperature is >90°F.
- Do not mix **CINNEX** with Captan, Bordeaux mixtures, oxidizing agents, including bleach, or highly alkaline or acid products as they will destabilize the product and can cause unacceptable phytotoxicity and/or reduced effectiveness on target pests.

## **APPLICATION INSTRUCTIONS**

For optimal performance spray product as soon as possible when pests are expected or when pests first appear. For foliar applications, apply **CINNEX** in sufficient spray volume and with adequate spray pressure to ensure complete and thorough coverage of all plant surfaces including both the top and bottom of leaves. Avoid excessive runoff. Best results can be obtained following 2-3 applications made at 5-10 day intervals. When pest pressure is heavy or plant canopy is dense, use higher rates and increase spray frequency. Spraying in the morning or evening hours will provide the best results.

For the control of insect pests, start applications prior to typical population thresholds.

**Mixing and Application Instructions:** Shake well before using. **CINNEX** has been found to be compatible with most commonly used insecticides, fungicides and miticides. Add required amount of **CINNEX** to a clean spray tank with at least one-half of the water to be sprayed. Agitate the mixture thoroughly and then fill the tank with remaining water and continue agitation. Always use this product promptly after mixing with water and do not let tank mix sit for any extended period.

To avoid problems, conduct a compatibility test before using this product in a tank mix with other pesticides. Check physical compatibility first, then mix the correct proportion of products in a small jar. Then, test tank mix combinations for phytotoxicity on a sample of plants prior to use. Due to the wide variation in climatic conditions, cultural practices, and other factors, the user assumes full responsibility for any crop damage or other liability resulting from the use of **CINNEX** in a tank mix combination.

**CINNEX** is designed for application without additional wetting agents and spreaders. Use adjuvants with **CINNEX** to improve control of insect pests in situations where achieving uniform plant coverage is difficult, including closed crop canopy, dense foliage and penetration into waxy leaf surfaces or when rainfall may remove spray deposits.

**pH:** It is advisable to use **CINNEX** in a pH water solution adjusted to neutral or slightly acid (around 6 - 6.5).

**Ground Application:** Apply **CINNEX** as a foliar spray by ground. Mix 32-64 fl oz of **CINNEX** in 100 gallons of water and apply at a sufficient spray volume to ensure complete coverage. For low volume applications, where less than 100 gallons of water is used, apply at a rate of 32-64 fl oz per 100 gallons of spray solution.

[In California, apply **CINNEX** as a foliar spray by ground using most commonly-used ground application equipment, including, tractor-mounted boom, airblast high clearance, hose-end, backpack, and other pressurized sprayers, hose-end or hand-held sprayers, foggers or mistblowers, water wheel and other drench applicators. Mix 16-56 fl oz of **CINNEX** in 100 gallons of water and apply in a minimum of 30 gallons of total spray volume gallons per acre and at a sufficient spray volume to ensure complete coverage. Higher volumes will be required for larger perennial crops.]

**Aerial Application:** Apply **CINNEX** as a foliar spray by air. **CINNEX** can be applied by fixed or rotary winged aircraft in a minimum of 10 gallons of total spray volume gallons per acre. Mix 32-64 fl oz of **CINNEX** in 100 gallons of water and apply at a sufficient spray volume to ensure complete coverage. For low volume applications, where less than 100 gallons of water is used, apply at a rate of 32-64 fl oz per 100 gallons of spray solution. Take standard precautions to minimize spray drift.

[In California, **CINNEX** can be applied by fixed or rotary winged aircraft. Mix 16-56 fl oz of **CINNEX** in 100 gallons of water and apply in a minimum of 30 gallons of total spray volume gallons per acre and at a sufficient spray volume to ensure complete coverage. Higher volumes will be required for larger perennial crops. Take standard precautions to minimize spray drift.]

**Soil Treatment:** Apply **CINNEX** by soil drench, shanked-in, soil injected, or in-furrow spray to protect against certain soil-borne diseases and insects. **CINNEX** can be applied by the following methods:

**Soil Drench:** Apply **CINNEX** at a concentration of 32-64 fl oz per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application during or shortly after transplant to control soil-borne diseases. Multiple drench applications can be made on a 10-14 day schedule.

[In California, apply **CINNEX** at a concentration of 16-56 fl oz per 100 gallons of water, and at a sufficient rate to thoroughly soak the growing media and root zone. Make an initial application during or shortly after transplant to control soil-borne diseases. Multiple drench applications can be made on a 10-14 day schedule.]

**Shanked-In and Injected:** Shank or inject **CINNEX** at a concentration of 32-256 fl oz per 100 gallons of water into the soil alone, or with most types of liquid nutrients.

[In California, shank or inject **CINNEX** at a concentration of 16-56 fl oz per 100 gallons of water into the soil alone, or with most types of liquid nutrients.]

**In-Furrow:** Apply **CINNEX** at planting as an in-furrow spray. Mix 32-64 fl oz of **CINNEX** in 100 gallons of water and apply at 5-15 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.

[In California, apply **CINNEX** at planting as an in-furrow spray. Mix 16-56 fl oz of **CINNEX** in 100 gallons of water and apply at 30 gallons per acre, directing the spray into the seed furrow just before the seeds are covered.]

## **TARGETED PESTS: INSECTS [†]**

**COLEOPTERA**, such as: **beetles**, **grubs** and **weevils** including Asian long-horned beetle, bark beetles, black vine weevil, Colorado potato beetle, elm bark beetle, European chafer, flea beetles, Japanese beetle, June beetle, leaf beetles, Mexican bean beetle, Northern masked chafer, rose chafer and Southern masked chafer and twig girders.

**DIPTERA**, such as: **flies\*** including Caribbean fruit fly, cherry maggots, crane fly, fungus gnat, Hessian fly, oriental fruit fly, Mediterranean fruit fly, marsh crane flies, melon fly, shore fly, spotted wing drosophila, and walnut husk fly; **leafminers** including citrus leafminers and serpentine leafminers.

\*Not intended for use on public health pests.

**HEMIPTERA AND HOMOPTERA**, such as: **true bugs** including boxelder bugs, chinch bugs, lygus bugs and stink bug; **lacebugs**; **leafhoppers** including grape leafhopper, spittlebug, potato leafhopper and variegated leafhopper; **mealy bugs** including apple mealy bugs, citrus mealy bugs, grape mealy bugs; **whiteflies** including greenhouse whitefly, silverleaf whitefly and sweet potato whitefly and woolly whitefly; **aphids** including apple aphid, green peach aphid, melon aphid, pea aphid, potato aphid and rose aphid; **psyllids** including pear psyllids and **scales** including black scale, brown soft scale, California red scale, coffee scale, olive scale, San Jose scale, and cottony cushion scale.

**HYMENOPTERA**, such as: **sawflies**\* including European sawflies, pear sawflies, red-headed pine sawflies, yellow-headed pin sawflies.

\*Not intended for use on public health pests.

**LEPIDOPTERA**, such as: **moths** including European pine shoot moth, pine tip moth and Tussock moth; **leafrollers** including blueberry leafroller, filbert leafroller, fruitree leafroller, citrus leafminers, grape leafroller, oblique banded leafroller, omnivorous leafroller; **cutworms** including black cutworm and citrus cutworm; **caterpillars and loopers** including bagworms, budworms, cabbage looper, canker worms, case bearers, caseworms, corn earworm, diamondback moth, fruit worms, grapeleaf skeletonizer, gypsy moth, hornworms, imported cabbageworm, navel orangeworm, soybean looper, spruce budworm, tent caterpillar, tip moths, tent caterpillars, tobacco budworm, tobacco hornworm, tomato pinworm and tussock moth; **armyworms** including beet armyworm, fall armyworm, lawn armyworm, southern armyworm and yellow striped armyworm; **webworms** and **leaf perforators**.

**ORTHOPTERA**, such as: **crickets**; **grasshoppers**; **locusts**.

**THYSANOPTERA**, such as: **thrips** including citrus thrips, flower thrips, gladiolus thrips, onion thrips, [*thrips palmi*][melon thrips] and Western flower thrips.

<sup>(†)</sup> [Not registered for use by California.]

## [TARGETED PESTS—California Only]

Use **CINNEX** in a foliar spray to control, suppress or repel soft bodied pests and piercing and sucking pests including\*:

**Aphids**, including: cotton aphid, green peach aphid, sharpshooter aphid.

**Ants**.

**Armyworms, Caterpillars and Loopers**, including: apple maggot adults, alfalfa caterpillar, alfalfa weevil larvae, armyworms, blueberry maggot, cabbage looper, caterpillars, caterpillar larvae, fruit worms, tent caterpillar, tobacco horn worm, tomato pin worm.

**Borers**, including: [*hypothenemus hampei*][coffee berry borer], long horned stem borer, peach twig borer, stem borer.

**Flies**, including: fungus gnats, walnut husk fly.

**Leafhoppers**, including: *Empoasca* spp., *Graphocephala* spp., *Macrostelus* spp.

**Mealybugs**, including: [*Dysmicoccus brevipes*][mealybug], *Planococcus* spp., *Pseudococcus* spp.

**Moths**, including: codling moth, grape berry moth, *Heliothis* spp., *Lepidoptera* spp.

**Plant Bugs**, including: apple maggots, blueberry maggot, leafrollers, lygus bugs, San Jose scale, soft scales, squash bug.

**Psyllids**, including: *Bactericera* spp., *Cacopsylla* spp., [*Diaphorina citri*][Asian citrus psyllid].

**Scale Insects** [*Hemiptera* spp.].

**Thrips**, including: *Frankliniella* spp., *Heliothrips* spp., [*Scirtothrips citri*][California citrus thrips], *Thrips* spp.

**True Bugs**, including: boxelder bug, stink bug.

**Whiteflies**, including: *Bemisia* spp., *Dialeurodes* spp., *Trialeurodes* spp.

\*Not intended for use on public health pests.]

## TARGETED DISEASES<sup>[†]</sup>

Such as Alternaria leaf spot (*Alternaria* spp.), Anthracnose (*Elsinoe ampelina*), Bacterial Leaf Blight, Black leg /bacterial soft rot/ Aerial Stem Rot (*Erwinia carotovora*), Black Mold (*Aspergillus niger*), Blue mold (*Penicillium* spp.), Botryosphaeria, Brown Rot (*Monilinia* spp.), Bulls Eye Rot (*Neofabraea* spp.), Cladosporium, Dollar Spot, Downy Mildew, Early Bight (*Alternaria* spp.), Fire blight (*Erwinia amylovora*), Fusarium (*Fusarium oxysporum*), *Fusarium* spp., Gray Mold (*Botrytis* spp.), Green mold (*Penicillium digitatum*), Late Blight (*Phytophthora infestans*), Mucor Fruit Rot (*Mucor* spp.), Phomopsis Soft Rot (*Phomopsis* spp.), Powdery mildew, *Pythium* spp., Phytophthora Root Rot (*Phytophthora* spp.), *Rhizoctonia* spp., Rhizopus Fruit Rot (*Rhizopus* spp.), Rust (*Puccinia* spp.), Scab (*Venturia* spp.), Shot Hole (*Xanthomonas arboricola*), Sour Rot (*Geotrichum*), Sour Rot Complex, Stem End Rot (*Gnomonia comari*), *Verticillium* spp., Walnut Blight, White Mold (*Sclerotinia*), Xanthomonas.

OTHER: Algae, Algae Scum, Moss, Liverwort, Hornwort, and Pearlwort.

<sup>[†]</sup> [Not registered for use by California.]

## [TARGETED DISEASES—California Only

algae, algae scum, apple scab, botrytis, brown rot, dollar spot, downey mildew, hornworts, liverworts, moss, pearlwards, [pitch canker][*Fusarium subglutinans* f. sp. *pini*], powdery mildews, *Pythium* spp., *Rhizoctonia* spp., and rusts.]

## GREENHOUSE AND OUTDOOR NURSERY CROPS

**Application Rates for Selected Crops:** Use CINNEX to prevent, control and suppress a broad range of plant diseases, and insects of the treated plants listed below.

<sup>[†]</sup> [Not registered for use by California.]

## ORNAMENTALS

### CHRISTMAS TREES AND CHRISTMAS TREE PLANTATIONS

### ORNAMENTAL SHRUBS AND PLANTS

Amaranthus, Arborvitae, Aster, Azalea, Caladium, Carnation, Chrysanthemum, Dahlia, Daisy, Ferns, Ficus, Fuchsias, Gardenia, Impatiens, Iris, Ivy, Jasmine, Lilac, Lilies, Marigold, Philodendron, Poinsettia, Rose, Zinnia

### ORNAMENTAL TREES

Ash, Austrian Pine, Birch, Cedar, Cyprus, Dogwood, Fir, Elm, Juniper, Maple, Oak, Pine, Spruce

## Foliar Application Use Rates<sup>[\*]</sup>

CINNEX	Use Rate Per 100 Gallons of Water			
	Standard Rate	High Pressure		Soil Treatment
	2 pints	3 pints	4 pints	4 - 16 pints
	32 fl oz	48 fl oz	64 fl oz	64 - 256 fl oz
Re-Treatment Interval (RTI)	5 - 10 days	5 - 7 days		14 - 60 days

<sup>[\*]</sup> [Not registered for use by California.]

## [Rate Chart—California Only

CINNEX	Use Rate Per 100 Gallons of Water			
	First Presence	Common Rate	High Pressure	
	1 pint	2 pints	3 pints	3.5 pints
	16 fl oz	32 fl oz	48 fl oz	56 fl oz
Re-Treatment Interval (RTI)	5 - 7 days	5 - 10 days		5 - 7 days

In those crops where water volume applications are up to 150 gallons per acre or more, it is advisable to use a dilution rate between 40-55 fl oz per 100 gallons.]

## **TURF**

### **Recreational turf and landscapes**

For prevention and control of algae, algae scum, and moss dilute 64-256 fl oz per 100 gallons of water. Apply 50 gallons per acre (1.25 gallons per 1000 sq ft) on a 14-28 day schedule. [In California, apply on a 28 day schedule.] For best results apply when moss and algae are actively growing. When algae, algae scum, and moss is well established make every attempt to dry out the afflicted areas. Once dry, perform spiking or verticutting to enhance turfgrass recovery in conjunction with treatment. [Except in California,] under severe algae, algae scum, and moss conditions, use a higher rate and apply on a 14 day schedule. Only a preventative program of treatment will prevent a recurrence of algae, algae scum, and moss when environmental conditions are favorable for growth.

Directions for Moss in Lawns and Turf: For best results on lawns use the higher spray volumes and thoroughly soak moss. When spraying mossy area, be sure to soak the moss growth thoroughly. Treated moss will turn a light yellow to dark orange color. Action is most rapid in warm, humid weather. After 30 minutes, treated area can be sprayed lightly with water. To improve appearance of lawn or turf, rake out dead moss a few days after treatment.

## **CONTAINER POTS OR STORAGE BINS**

For prevention and control of algae, algae scum, moss liverworts, hornworts, and pearlwards in containers, pots, or storage bins apply a rate of 1.25 fl oz / 1 gal of water as needed. When algae, and moss is well established make every attempt to dry out the afflicted areas. For best results apply when moss and algae are actively growing. Only a preventative program of treatment will prevent a recurrence of algae, algae scum, moss liverwort, hornwort, and pearlwort when environmental conditions are favorable for growth.

## **GREENHOUSE (GLASSHOUSE)**

For prevention and control of algae, algae scum, moss liverworts, hornworts, and pearlwards on glass, other glasshouse surfaces or in containers, pots, or storage bins, apply a rate of 1.25 fl oz / 1 gal of water as needed. When algae, algae scum, and moss is well established make every attempt to dry out the afflicted areas. For best results apply when moss and algae are actively growing. Apply mixed spray to thoroughly wet the area and soak the unwanted moss and algae. For best results, leave spray on area for an hour. Only a preventative program of treatment will prevent a recurrence of algae, algae scum, moss liverwort, hornwort, and pearlwort when environmental conditions are favorable for growth.

## **STRUCTURAL, HARD SURFACES, OR DECORATIVE SURFACES**

Structures including<sup>[†]</sup> Roofs, Driveways, Roadways, Fences, Decks, Siding, Steps, Patios, and Other Outdoor Surfaces constructed of Composition Shingles, Wood, Asphalt, Concrete, Brick, Tile, Stone and Plastic Resins

For prevention and control of algae, and moss on structures including roofs, driveways, roadways, fences, decks, siding, steps, patios, and other outdoor surfaces constructed of composition shingles, wood, asphalt, concrete, brick, tile, stone and plastic resins. Apply at a rate of 2.5 fl oz / 1 gal of water as needed. When algae, and moss is well established make every attempt to dry out the afflicted areas. For best results apply when moss and algae are actively growing. Only a preventative program of treatment will prevent a recurrence of algae, algae scum, moss liverwort, hornwort, and pearlwort when environmental conditions are favorable for growth.

[In California, for prevention and control of algae, and moss on residential structures (e.g., wood and/or concrete walls, steps, stairs, foundations, seats, walkways), apply at a rate of 2 fl oz / 1 gal of water as needed. When algae and moss is well established make every attempt to dry out the afflicted areas. For best results apply when moss and algae are actively growing. Only a preventative program of treatment will prevent a recurrence of algae, algae scum, moss liverwort, hornwort, and pearlwort when environmental conditions are favorable for growth.]

<sup>[†]</sup> [Not registered for use by California.]

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool dry place inaccessible to children. Store in original container only. Keep container tightly closed when not in use.

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

**CONTAINER HANDLING: [Nonrefillable Plastic Containers (Capacity Equal to or Less Than 5 Gallons):]**

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

## WARRANTY

Sym-Agro, Inc. warrants that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. Buyers and users of this product assume the risk of any use contrary to such directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. To the extent consistent with applicable law, the Seller's liability for any breach of warranty shall not exceed the purchase price of the material as to which a claim is made.

To the extent consistent with applicable law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, or without the fault or negligence of the Seller, or from failure to follow the label.

[EPA APPROVAL DATE]

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

## **{SUBLABEL D: FRUIT & TUBER POST HARVEST TREATMENTS}**

### **{BOOKLET FRONT PANEL}**

# **CINNEX**

Fungicide – Insecticide –Algaecide

{CINNEX POST HARVEST} {CINTERRA} {CINTERRA POST HARVEST}

FOR POST-HARVEST TREATMENT OF [FRUITS] [AND] [TUBERS][.]

[Not registered for use by California.]

#### **ACTIVE INGREDIENT:**

Cinnamaldehyde (CAS No. 104-55-2) ..... w/w% 22.50%

**OTHER INGREDIENTS:** ..... 77.50%

**TOTAL:** ..... 100.00%

Contains 1.92 pounds of cinnamaldehyde per gallon.

**KEEP OUT OF REACH OF CHILDREN**

## **CAUTION**

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything 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 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a> .	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

**EPA Reg. No.:** 87946-[R]

**Net Contents:** [Gallons] [Gal[s]][.]

**EPA Establishment No.:**

**[Batch No.:][Lot No.:]**

**Manufactured by:** Sym-Agro, Inc.  
111 South Court Street Suite 206  
Visalia CA, 93291

**[Distributed by:]**

{Company name and address}



## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION.** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirts and long pants
- Shoes plus socks
- Waterproof gloves

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

### **ENGINEERING CONTROLS**

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**

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment wash water or rinsate.

### **PHYSICAL OR CHEMICAL HAZARDS**

**Combustible.** Do not use or store near heat or open flame. Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State and Tribe, consult the State/Tribal 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), notification to workers, and restricted-entry interval. The requirements in this box 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
- Shoes plus socks
- Waterproof gloves

## PRODUCT INFORMATION

**CINNEX** is a broad-spectrum biopesticide emulsifiable concentrate fungicide for the prevention, control and suppression of rot on post-harvest fruits and [tuberous vegetables] [potatoes]. **CINNEX** contains the active ingredient, cinnamaldehyde. **CINNEX** is most effective when applied prior to the onset of disease.

**Product Modes of Action:** **CINNEX** is a soft formula with a high content of a specific active aldehyde. **CINNEX** has a knock down and eradicated effect against many fungal diseases.

**CINNEX** has multiple modes of action in preventing, controlling and suppressing plant diseases. It is effective against fungal diseases by disrupting the cell membranes as well as inhibiting the growth, attachment, and penetration of pathogenic spores into the plant tissue. Disease control is achieved by both direct contact and fumig activity.

**CINNEX** offers a valuable tool for management of resistance to chemical fungicides through its multiple and unique modes of action.

## FUNGICIDE RESISTANCE MANAGEMENT

Integrate **CINNEX** into an overall disease management program within each packinghouse. Fungal pathways can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, practice postharvest resistance management strategies. These may include rotating and/or tank mixing with product having different modes of action. Responsible resistance management practices are necessary to ensure the long-term effectiveness for decay control.

## MIXING INSTRUCTIONS

Fill tank with half of the required amount of water or water wax and start mechanical agitation. Add the required amount of **CINNEX** and then add the remaining volume of water or water wax. Maintain agitation after mixing and do not allow treating solution to stand overnight or for prolonged periods. For in-line injection systems better distribution will be achieved by injecting a larger volume of a more dilute solution per unit of time.

The physical compatibility of **CINNEX** with all tank mix partners and wax types has not been fully investigated. This product cannot be mixed with any product containing a label prohibition against such mixing. Follow the most restrictive labeling requirements of any tank mix partner. No label dosage rates for the individual products may be exceeded.

Prior to tank mixing with **CINNEX**, conduct a jar test with the volumes and rates typically used for postharvest disease control. Add proportionate amounts of the products to a small container of water or water wax in the following order: wettable powders and water-dispersible granules first, followed by liquid flowables, and emulsifiable concentrates last. After thorough mixing, let stand for at least 15 minutes. Separation, globules, sludge, flakes or other precipitates are indicative of physical incompatibility. Physical compatibility is indicated if the combination remains mixed or can be remixed readily.

THE CROP SAFETY OF ALL POTENTIAL PESTICIDE TANK MIXES WITH **CINNEX**, INCLUDING ANTI-SCALD AGENTS AND WAXES, HAS NOT BEEN TESTED ON ALL CROPS AND VARIETIES. BEFORE APPLYING ANY TANK MIXTURE, CONFIRM SAFETY TO THE TARGET CROP BEFORE USE.

## POST-HARVEST TREATMENTS

### POME FRUIT

Apple (*Malus domestica*), Crabapple (*Malus* spp.), Loquat (*Eriobotrya japonica*), Mayhaw (*Crataegus azarolus*), Pear (*Pyrus communis*), Oriental pear (*Pyrus* spp.), Quince (*Chaenomeles* spp.) and cultivars, varieties and/or hybrids of these.

Use **CINNEX** as a postharvest dip, drench, flood, or spray for the control of certain postharvest fruit rots caused by:

- Blue mold (*Penicillium expansum*)
- Gray mold (*Botrytis cinerea*)
- Mucor rot (*Mucor piriformis*)
- Sphaeropsis rot (*Sphaeropsis pyriputrescens*)
- Phacidiopycnis rot (*Phacidiopycnis piri*)
- Speck rot (*Phacidiopycnis washingtonensis*)

Application Method	Rate	Instructions
Bin/Truck Drench or In-Line Dip/ Drench or Flooders	32-64 fl oz / 100 gallons	<ul style="list-style-type: none"> <li>• Ensure proper coverage of fruit.</li> <li>• Mix 32-64 fl oz in 100 gallons of water, wax/oil emulsion, or aqueous dilution of wax oil/ emulsion.</li> <li>• For in-line dip or drench applications, treat fruit for 10 seconds and allow the fruit to drain.</li> </ul>
In-line Aqueous or Fruit Coating Spray Application	32-64 fl oz / 100 gallons (200,000 lbs. of fruit)	<ul style="list-style-type: none"> <li>• Ensure proper coverage of fruit.</li> <li>• Mix the fungicide solution in appropriate water, wax/oil emulsion, or aqueous dilution of wax oil/ emulsion.</li> <li>• Use T-jet, CDA or similar application system.</li> </ul>

### STONE FRUIT

Apricot (*Prunus armeniaca*), Nectarine (*Prunus persica*), Peach (*Prunus persica*), Plum, Chickasaw (*Prunus agustifolia*); Plum, Damson (*Prunus domestica* spp. *insititia*); Plum, Japanese (*Prunus salicina*); Plumcot (*Prunus armeniaca* x *P. domestica*); Prune (fresh)(*Prunus domestica*, *Prunus* spp.); and cultivars, varieties and/or hybrids of these.

Use **CINNEX** as a postharvest dip, drench, flood, or spray for the control of certain postharvest fruit rots caused by:

- Brown rot (*Monilinia* spp.)
- Gray mold (*Botrytis cinerea*)
- Sour rot (*Geotricum* spp.)
- Rhizopus rot (*Rhizopus* spp.)

Application Method	Rate	Instructions
In-Line Dip/drench	32-64 fl oz / 100 gallons	<ul style="list-style-type: none"> <li>• Ensure proper coverage of fruit.</li> <li>• Mix 32-64 fl oz in 100 gallons of water, wax/oil emulsion, or aqueous dilution of wax/oil emulsion.</li> <li>• Dip for 10 seconds and allow the fruit to drain.</li> </ul>
In-line Aqueous or Fruit Coating Spray Application	32-64 fl oz / 100 gallons (200,000 lbs. of fruit)	<ul style="list-style-type: none"> <li>• Ensure proper coverage of fruit.</li> <li>• Mix the fungicide solution in appropriate water, wax/oil emulsion, or aqueous dilution of wax oil/ emulsion.</li> <li>• Use T-jet, CDA or similar application system.</li> </ul>

### CHERRIES

Cherry, sweet (*Prunus avium*); Cherry, tart (*Prunus cerasis*); and all other cultivars and hybrids of these.

Use **CINNEX** as a post-harvest dip, drench, flood, or spray for the control of certain postharvest fruit rots caused by:

- Brown rot (*Monilinia* spp.)
- Gray mold (*Botrytis cinerea*)

Application Method	Rate	Instructions
In-line Aqueous or Flooder Application  High volume application	32-64 fl oz / 100 gallons (50,000 lbs of fruit)	<ul style="list-style-type: none"> <li>• Ensure proper coverage of fruit.</li> <li>• Mix 32-64 fl oz in 100 gallons of water, wax/oil emulsion, or aqueous dilution of wax/oil emulsion.</li> <li>• Use flooder, T-jet or similar application system.</li> </ul>

## CITRUS FRUITS

Calamondin, Citrus citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin, Orange, sour and sweet, Pummelo, Satsuma mandarin (One Application Only)

Use **CINNEX** as a postharvest dip, drench, flood, or spray for the control of certain postharvest fruit rots caused by:

- Blue mold (*Penicillium digitatum*)
- Green mold (*Penicillium italicum*)
- Stem end rot (*Diplodanatalensis*)

Application Method	Rate	Instructions
Bin/Truck Drench or In-Line Dip/ Drench or Flooders	32-64 fl oz / 100 gallons	<ul style="list-style-type: none"> <li>• Ensure proper coverage of fruit.</li> <li>• Mix 32-64 fl oz in 100 gallons of water, wax/oil emulsion, or aqueous dilution of wax oil/ emulsion.</li> <li>• For in-line dip or drench applications, treat fruit for 3 minutes and allow the fruit to drain.</li> </ul>
In-line Aqueous or Fruit Coating Spray Application	32-64 fl oz / 100 gallons (200,000 lbs. of fruit)	<ul style="list-style-type: none"> <li>• Ensure proper coverage of fruit.</li> <li>• Mix the fungicide solution in appropriate water, wax/oil emulsion, or aqueous dilution of wax oil/ emulsion.</li> <li>• Use T-jet, CDA or similar application system.</li> </ul>

## POTATO

Use **CINNEX** as a postharvest dip, drench, flood, or spray for the control of certain postharvest tuber rots caused by:

- Fusarium Tuber Rot (*Fusarium* spp.)
- Pink Rot (*Phytophthora erythroseptica*)
- Black Scurf (*Rhizoctonia* spp.)
- Silver Scurf (*Helminthosporium solani*)
- *Pythium* spp.

Mist unwashed tubers on a conveyor line, with tumbling action, entering storage with 32-64 fl oz per 100 gallons of **CINNEX** in sufficient water for complete coverage. If an additional treatment is necessary before shipping, mist the tubers at the same rate or dip the tubers for 20 seconds in a solution containing 32-48 fl oz of **CINNEX** per 100 gallons of water.

Use **CINNEX** as part of an Integrated Management Program for potatoes, which includes prevention of bruising during harvest and maintaining proper storage temperature and relative humidity. Neither cultural practices nor chemical measures will prevent Fusarium infection if potatoes are damaged or improperly stored.

### RESTRICTION:

- Do not treat seed potatoes after cutting.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool dry place inaccessible to children. Store in original container only. Keep container tightly closed when not in use.

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

**CONTAINER HANDLING: [Nonrefillable Plastic Containers (Capacity Equal to or Less Than 5 Gallons):]**

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

## WARRANTY

Sym-Agro, Inc. warrants that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller's directions. Buyers and users of this product assume the risk of any use contrary to such directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. To the extent consistent with applicable law, the Seller's liability for any breach of warranty shall not exceed the purchase price of the material as to which a claim is made.

To the extent consistent with applicable law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, or without the fault or negligence of the Seller, or from failure to follow the label.

[EPA APPROVAL DATE]

{Note to reviewer: [Text] in brackets denotes optional text. {Text} in braces denotes where in the final label text will appear and notes to reviewer.}

## **{SUBLABEL E: SEED TREATMENT}**

### **{BOOKLET FRONT PANEL}**

# **CINNEX**

Fungicide – Insecticide –Algaecide

{CINNEX ST} {CINTERRA} {CINTERRA ST}

[FOR SEED TREATMENT USE[.]]

[Not registered for use by California.]

#### **ACTIVE INGREDIENT:**

Cinnamaldehyde (CAS No. 104-55-2) ..... **w/w%**  
22.50%

**OTHER INGREDIENTS:** ..... **77.50%**

**TOTAL:** ..... **100.00%**

Contains 1.92 pounds of cinnamaldehyde per gallon.

**KEEP OUT OF REACH OF CHILDREN**

## **CAUTION**

<b>FIRST AID</b>	
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything 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 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>IF IN EYES:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOTLINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a> .	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][,] [additional] [Precautionary Statements][,] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

**EPA Reg. No.:** 87946-[R]

**Net Contents:** [Gallons] [Gal[s]]

**EPA Establishment No.:**

**[Batch No.:][Lot No.:]**

**Manufactured by:** Sym-Agro, Inc.  
111 South Court Street Suite 206  
Visalia CA, 93291

**[Distributed by:]**

{Company name and address}

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION.** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers must wear:

- Long-sleeved shirts and long pants
- Shoes plus socks
- Waterproof gloves

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

### **ENGINEERING CONTROLS**

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**

Users should:

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment wash water or rinsate.

### **PHYSICAL OR CHEMICAL HAZARDS**

**Combustible.** Do not use or store near heat or open flame. Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

## **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State and Tribe, consult the State/Tribal 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), notification to workers, and restricted-entry interval. The requirements in this box 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
- Shoes plus socks
- Waterproof gloves

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

## PRODUCT INFORMATION

**CINNEX** is a broad-spectrum biopesticide emulsifiable concentrate fungicide for the prevention, control and suppression of disease on seeds, seedlings, bulbs, cuttings, plants, and tubers. **CINNEX** contains the active ingredient, cinnamaldehyde. **CINNEX** is most effective when applied prior to the onset of disease.

**Product Modes of Action:** **CINNEX** is a soft formula with a high content of a specific active aldehyde. **CINNEX** has a knock down and eradicated effect against many fungal diseases.

**CINNEX** has multiple modes of action in preventing, controlling and suppressing plant diseases. It is effective against fungal diseases by disrupting the cell membranes as well as inhibiting the growth, attachment, and penetration of pathogenic spores into the plant tissue. Disease control is achieved by both direct contact and fuming activity.

**CINNEX** offers a valuable tool for management of resistance to chemical fungicides through its multiple and unique modes of action.

## FUNGICIDE RESISTANCE MANAGEMENT

Integrate **CINNEX** into an overall disease management program. Fungal pathways can develop resistance to products with the same mode of action when used repeatedly. Because resistance development cannot be predicted, practice resistance management strategies. These may include rotating and/or tank mixing with product having different modes of action. Responsible resistance management practices are necessary to ensure the long-term effectiveness for decay control.

## SEED TREATMENT

Apply **CINNEX** to seeds, seedlings, bulbs, as a seed dressing, or as cuttings dip or tuber dip at plant. Treat only those seeds needed for immediate use, minimizing the interval between treatment and planting. Immerse tubers, plant, or cuttings, remove, and allow to drain.

Type of Seed	Disease	Rate /100 Gallons	Notes
True Seed Crops	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	32 - 64 fl oz	Apply sufficient diluted product to soak seeds. Apply directly to seeds. Do not rinse. Allow to dry and/or plant soaked seeds.
In-Furrow Seed Treatment at Planting	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	32 - 64 fl oz	Apply sufficient diluted product to wet the soil covering seeds. Apply by spray, furrow and/or in-furrow irrigation.
Dip Treatment for Tubers at Planting	<i>Fusarium</i> spp. <i>Phytophthora</i> spp. <i>Pythium</i> spp. <i>Rhizoctonia</i> spp. <i>Verticillium</i> spp.	32 - 64 fl oz	Pre-dip tubers prior to planting. Apply sufficient product to tubers before planting.

## RESTRICTIONS:

- Do not store excess treated seeds beyond planting time.



- Do not rinse cuttings, plants, or tubers.

## SEED CONTAINER LABEL REQUIREMENTS

The U.S. Environmental Protection Agency requires the following statements (or a subset of the following statements as appropriate) on containers containing seed treated with **CINNEX**:

- “Store treated seed away from food and feedstuffs”.
- “Do not allow children, pets or livestock to have access to treated seeds”.
- “Wear long pants, long-sleeved shirt and protective gloves when handling treated seed”.
- “Treated seeds exposed on soil surface may be hazardous to wildlife. Cover or collect treated seeds spilled during loading and planting (such as in row ends)”.
- “Dispose of all excess treated seed by burying seed away from bodies of water”.
- “Dispose of seed packaging or containers in accordance with local requirements”.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool dry place inaccessible to children. Store in original container only. Keep container tightly closed when not in use.

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

**CONTAINER HANDLING: [Nonrefillable Plastic Containers (Capacity Equal to or Less Than 5 Gallons):]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

## WARRANTY

Sym-Agro, Inc. warrants that this product conformed to its description and was reasonably fit for the purposes stated on the label when used in accordance with Seller’s directions. Buyers and users of this product assume the risk of any use contrary to such directions. SELLER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, INCLUDING ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS OR OF MERCHANTABILITY AND NO AGENT OF SELLER IS AUTHORIZED TO DO SO. To the extent consistent with applicable law, the Seller’s liability for any breach of warranty shall not exceed the purchase price of the material as to which a claim is made.

To the extent consistent with applicable law, Buyers and users of this product are responsible for all loss or damage from use or handling of this product which results from conditions beyond the control of Seller, or without the fault or negligence of the Seller, or from failure to follow the label.

[EPA APPROVAL DATE]

{BASE LABEL}

CINNEX

Fungicide – Insecticide –Algaecide

{SUBLABEL A} [FOR USE ON] [GREENHOUSE] [AND] [OUTDOOR] [FOOD CROPS,] [ORNAMENTALS,] [FLOWERS,] [TREES,] [SHRUBS,] [AND] [PLANTS][SEED TREATMENT][.]

{SUBLABEL B} [FOR [HOMEOWNER] USE ON] [FOOD CROPS,] [ORNAMENTALS,] [FLOWERS,] [TREES,] [AND] [PLANTS][SEED TREATMENT][.] [FOR] [HOME] [AND] [GARDEN] [USE][.]

{SUBLABEL C} [FOR USE [IN][ON]] [GREENHOUSES] [CONTAINER POTS AND STORAGE BINS] [AND] [PROFESSIONAL] [LANDSCAPE], [ORNAMENTALS,] [FLOWERS,] [TREES] [SHRUBS] [AND] [PLANTS] [TURF][.]

{SUBLABEL D} [FOR POST-HARVEST TREATMENT OF [FRUITS] [AND] [TUBERS][.]]

{SUBLABEL E} [FOR SEED TREATMENT USE[.]]

[Not registered for use by California.]

ACTIVE INGREDIENT:	w/w%
Cinnamaldehyde (CAS No. 104-55-2).....	22.50%
OTHER INGREDIENTS: .....	77.50%
TOTAL: .....	100.00%
Contains 1.92 pounds of cinnamaldehyde per gallon.	

KEEP OUT OF REACH OF CHILDREN  
CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
IF IN EYES:	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergencies, call the poison control center at 1-800-222-1222. For general information on this product contact the National Pesticides Information Center (NPIC) at 1-800-858-7378, Monday through Friday, 8 AM to 12 PM PST, or at <a href="http://npic.orst.edu">http://npic.orst.edu</a> .	

[See] [inside] [label] [booklet] [side] [panel] [for] [First Aid][.] [additional] [Precautionary Statements][.] [and] [Directions for Use] [including Storage and Disposal] [instructions][.]

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

ENVIRONMENTAL HAZARDS

{SUBLABEL A, C, D, and E} [For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not contaminate water when disposing of equipment wash water or rinsate.]

{SUBLABEL B} [To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.]

PHYSICAL OR CHEMICAL HAZARDS

**Combustible.** Do not use or store near heat or open flame. Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in a cool dry place inaccessible to children.

{SUBLABEL A, C, D, AND E} **[PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING: [Nonrefillable Plastic Containers (Capacity Equal to or Less Than 5 Gallons):]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into formulation equipment or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

**[Nonrefillable Plastic Containers (Capacity Greater Than 5 Gallons):]** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into formulation equipment. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into formulation equipment or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

**[Nonrefillable Plastic Containers (e.g., Intermediate Bulk Containers [IBC]) (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down):]** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into formulation equipment and before final disposal using the following pressure rinsing procedure: Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure spray duration and/or spray volume. If the manufacturer's instructions are not available pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain pour or pump rinsate into formulation equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration.]{SUBLABEL B} **[PESTICIDE DISPOSAL AND CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling, if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.]

EPA Reg. No.: 87946-[R]  
EPA Establishment No.:  
[Batch No.:][Lot No.:]

Net Contents: [Gallons][Ounces] [Gal[s]][Oz[s]][.]

Manufactured by: Sym-Agro, Inc.  
111 South Court Street Suite 206  
Visalia CA, 93291

[Distributed by:]  
{Company name and address}

[EPA APPROVAL DATE]

## {OPTIONAL MARKETING STATEMENTS}

- Controls moss on lawns, roofs, decks, driveways, walkways, fences
- Kills moss and algae quickly - quick visible results
- Non-staining formula - does not stain concrete, pavement, stucco or wood.
- Moss and Algae Killer
- Exclusive formula
- Can be used at low temperatures.
- Gets rid of damaging moss and algae.
- Can be used around border plants when used as directed.
- **CINNEX** can be used on lawns and around border plants.
- For outdoor use around the home - can be used on lawns.
- **CINNEX** can be used in early spring at the first sign of moss growth.
- No unpleasant odor.
- **CINNEX** will not damage painted and metal surfaces.
- [Will][Does] not damage gutters, metal flashing or downspouts.