19713-520 8/2/2012 1/43

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D C 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

August 2, 2012

Luz G Chan
Drexel Chemical Company
P O Box 13327
Memphis, TN 38113-0327

Subject: Amended labeling to clarify directions for use in nurseries
Drexel Chlorpyrifos 4E-AG
EPA Reg No 19713-520
EPA Decision No 463415

Dear Ms Chan

The proposed labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable Please submit one copy of your final printed labeling before you release the product for shipment Your release for shipment of the product constitutes acceptance of these conditions If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e) If you have any questions, please contact me by phone at (703) 308-8045, or by email at eagle venus@epa gov

Regards,

Venus Eagle

Venus Eagle, Product Manager (01)
Insecticide-Rodenticide Branch
Registration Division (7505P)

Enclosure

RESTRICTED USE PESTICIDE

For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator s certification

ACCEPTED
AUG - 2 2012
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under
EPA Reg No 19713-520

Drexel

Chlorpyrifos 4E-AG

Insecticide

GROUP 1B INSECTICIDE

For control of listed insects infesting certain Field Fruit Nut and Vegetable Crops Turfgrass (grown for Sod) Ornamentals Non-Residential Turf and Other Listed Non Residential Uses

ACTIVE INGREDIENT	
Chlorpyrifos	44 9%
OTHER INGREDIENTS*	55 1%
TOTAL	100 0%

This product contains 4 pounds of Chlorpyrifos per gallon
Contains petroleum distillates

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

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

See FIRST AID on Page 2

EPA Reg No 19713-520
EPA Est No 19713-XX-XXX

Net Content _____

Manufactured By

Drexel Chemical Company
PO BOX 13327 MEMPHIS TN 38113-0327
SINCE 1972

520SP 0812 P

FIRST AID
Organophosphate

IF SWALLOWED
Call a poison control center or doctor immediately for treatment advice
Do not induce vomiting unless told to do so by a poison control center or doctor
Do not give any liquid to the person
Do not give anything by mouth to an unconscious or convulsing person

IF IN EYES
Hold eye open and rinse slowly and gently with water for 15 to 20 minutes
Remove contact lenses if present after the first 5 minutes then continue rinsing eye
Call a poison control center or doctor for treatment advice

IF ON SKIN OR CLOTHING
Take off contaminated clothing
Rinse skin immediately with plenty of water for 15 to 20 minutes
Call a poison control center or doctor for treatment advice

IF INHALED
- Move person to fresh air
- If person is not breathing call 911 or an ambulance then give artificial respiration preferably mouth-to-mouth
- Call a poison control center or doctor for further treatment advice

Have the product container or label with you when calling a poison control center or doctor or going for treatment For information on this pesticide product (including health concerns medical emergencies or pesticide incidents) call the National Pesticide Information Center at 1 800-858 7378

NOTE TO PHYSICIAN This product contains an organophosphate that inhibits cholinesterase Treat symptomatically If exposed plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful) Atropine only by injection is the preferable antidote Oximes such as 2-PAM/protopam may be therapeutic if used early however use only in conjunction with atropine In case of severe acute poisoning use antidote immediately after establishing an open airway and respiration Contains petroleum distillate Do not induce vomiting since vomiting may cause aspiration pneumonia

PRECAUTIONARY STATEMENTS
Hazards To Humans And Domestic Animals

WARNING May be fatal if swallowed Causes substantial but temporary eye injury Causes skin irritation Harmful if absorbed through skin Do not get in eyes on skin or on clothing

PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

Mixers and loaders using a mechanical transfer loading system and applicators using aerial application equipment must wear
Long-sleeved shirt and long pants
Shoes and socks

In addition to the above, mixers and loaders using a mechanical transfer loading system must wear
Chemical-resistant gloves
Chemical resistant apron
A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH approved respirator with any R P or HE filter

See Engineering Controls for additional requirements

(continued)

(continuation)

All other mixers, loaders, applicators and other handlers must wear

Coveralls over long-sleeved shirt and long pants
Chemical-resistant gloves made of waterproof material such as Barrier laminate and Viton ≥ 14 mils
Chemical-resistant apron when mixing or loading or exposed to the concentrate
Chemical resistant footwear plus socks
Protective eyewear (goggles face shield or safety glasses)
Chemical-resistant headgear for overhead exposure
A NIOSH approved respirator with any R P or HE filter

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

ENGINEERING CONTROLS

Mixers and loaders supporting aerial applications must use a mechanical transfer system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170 240 (d) (4)] for dermal protection and must

Wear the personal protective equipment required above for mixers/loaders
Wear protective eyewear if the system operates under pressure and
Be provided and have immediately available for use in an emergency such as broken package spill or equipment breakdown coveralls chemical-resistant footwear and chemical-resistant headgear if overhead exposure

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170 240 (d) (6)]

Use of human flaggers is prohibited Mechanical flagging equipment must be used

When handlers use closed systems or closed cab motorized ground application equipment 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 1) Wash hands before eating drinking chewing gum using tobacco or using the toilet 2) Remove clothing/PPE immediately if pesticide gets inside Then wash thoroughly and put on clean clothing 3) Remove PPE immediately after handling this product Wash the outside of gloves before removing As soon as possible wash thoroughly and change into clean clothing

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish aquatic invertebrates small mammals and birds Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas Do not contaminate water when disposing of equipment washwater or rinsate

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area Protective information may be obtained from your cooperative agricultural extension service

PHYSICAL OR CHEMICAL HAZARDS

Combustible Do not use or store near heat or open flame

USE INFORMATION

CHLORPYRIFOS 4E-AG insecticide forms an emulsion when diluted with water and is suitable for use in all conventional spray equipment Consult your State Experiment Station or State Extension Service for proper timing of applications

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling Do not apply this product in a way that will contact workers or other persons either directly or through drift Only protected handlers may be in the area during application For any requirements specific to your State or Tribe consult the Agency responsible for pesticide regulation Read all *DIRECTIONS FOR USE* carefully before applying

AGRICULTURAL USE REQUIREMENTS

Use this product in accordance with its labeling and with the Worker Protection Standard (WPS) 40 CFR Part 170 This standard contains requirements for the protection of agricultural workers on farms forests nurseries and greenhouses and handlers of agricultural pesticides It contains requirements for training decontamination notification and emergency assistance It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry intervals and notification to workers The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) The REI for each crop is listed in the directions for use associated with each crop

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

Certified crop advisors or persons entering under their direct supervision under certain circumstances may be exempt from the early reentry requirements pursuant to 40 CFR Part 170

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 over short sleeved shirt and short pants
- Chemical-resistant gloves made out of any waterproof material
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for over head exposure

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas

USE PRECAUTIONS

At low spray volumes under high temperature and wind conditions insect control may be reduced Some reduction in insect control may occur under unusually cool conditions

Flood irrigation To avoid contamination of irrigation tail waters do not flood irrigate within 24 hours following a soil surface or foliar application of this product

INSECTICIDE RESISTANCE MANAGEMENT (IRM)

This product contains a Group 1B insecticide Insect/mite biotypes with acquired resistance to Group 1B may eventually dominate the insect/mite population if Group 1B insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species This may result in partial or total loss of control of those species by this product or other Group 1B insecticides

To delay development of insecticide resistance the following are recommended

- Avoid consecutive use of insecticides with the same mode of action (same insecticide group) on the same insect species
- Use tank mixtures of premix products containing insecticides with different modes of action (different insecticide groups) provided the products are registered for intended use
- Base insecticide use on comprehensive Integrated Pest Management (IPM) programs
- Monitor treated insect populations in the field for loss of effectiveness
- Contact your local extension specialist certified crop advisor and or manufacturer for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems

SPRAY DRIFT MANAGEMENT

Do not allow spray to drift from the application site and contact people structures people occupy at any time and the associated property parks and recreation areas nontarget areas aquatic and wetland areas woodlands pastures rangelands or animals

Avoiding spray drift at the application site is the responsibility of the applicator The interaction of many equipment and weather-related factors determine the potential for spray drift The applicator is responsible for considering all of these factors when making decisions to apply this product

Observe the following precautions when spraying this product adjacent to permanent bodies of water such as rivers natural ponds lakes streams reservoirs marshes estuaries and commercial fish ponds The following treatment setbacks or buffer zones must be utilized for applications around the above listed aquatic areas with the following application equipment

Application Method	Required Setback (Buffer Zone) (feet)
Ground boom	25
Chemigation	25
Orchard airblast	50
Aerial (fixed wing or helicopter)	150

Making applications when wind is blowing away from sensitive areas is the most effective way to reduce the potential for adverse effects

The following spray drift best management practices are recommended to avoid off-target drift movement from applications

Aerial Application

1 The boom width must not exceed 75% of the wingspan or 90% of the rotor blade
2 Nozzles must always point backward parallel with the air stream and must never be pointed downward more than 45 degrees
3 Nozzles must produce a medium or coarser droplet size (255-340 microns volume median diameter) per ASABE Standard 572 under application conditions Airspeed pressure and nozzle angle can all effect droplet size See manufacturer s catalog or USDA/NAAA Applicator s Guide for spray size quality ratings
4 Applications must not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind
5 Use upwind swath displacement and apply only when wind speed is 3 to 10 mph as measured by an anemometer Do not apply product when wind speed exceeds 10 mph
6 If application includes a no-spray zone do not release spray at a height greater than 10 feet above the ground or crop canopy

Where states have more stringent regulations they must be observed

The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory

Aerial Drift Reduction Advisory

This section is advisory in nature and does not supersede the mandatory label requirements

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control Applying larger droplets reduces drift potential but will not prevent adverse effects from drift if applications are made improperly or under unfavorable environmental conditions (see Wind Temperature and Humidity and Temperature Inversions)

Controlling Droplet Size

Volume – Use high flow rate nozzles to apply the highest practical spray volume Nozzles with higher rated flows produce larger droplets

Pressure – Do not exceed the nozzle manufacturer s recommended pressures For many nozzle types lower pressure produces larger droplets When higher flow rates are needed use higher flow rate nozzles instead of increasing pressure

Number of nozzles – Use the minimum number of nozzles that provide uniform coverage

Nozzle Orientation – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice Significant deflection from horizontal will reduce droplet size and increase drift potential

Nozzle Type – Use a nozzle type that is designed for the intended application With most nozzle types narrower spray angles produce larger droplets Consider using low-drift nozzles Solid stream nozzles oriented straight back produce larger droplets than other nozzle types

Boom Length

For some use patterns reducing the effective boom length to less than three-fourths of the wingspan or rotor length may further reduce drift without reducing swath width

Application Height

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind

Swath Adjustment

When applications are made with a crosswind the swath will be displaced downwind Therefore on the up and downwind edges of the field the applicator must compensate for this displacement by adjusting the path of the aircraft upwind Swath adjustment distance should increase with increasing drift potential (higher wind smaller drops etc)

Wind

Drift potential is lowest between speeds of 2 to 10 mph However many factors including droplet size and equipment type determine drift potential at any given speed Application should be avoided below 2 mph due to variable wind direction and high inversion potential

Note Local terrain can influence wind patterns Every applicator should be familiar with local wind patterns and how they affect spray drift

Temperature and Humidity

When making applications in low relative humidity set up equipment to produce larger droplets to compensate for evaporation Droplet evaporation is most severe when conditions are both hot and dry

Temperature Inversions

Applications should not occur during a temperature inversion because drift potential is high Temperature inversions restrict vertical air mixing which causes small suspended droplets to remain in a concentrated cloud This cloud can move in unpredictable directions due to the light variable winds common during inversions Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind They begin to form as the sun sets and often continue into the morning Their presence can be indicated by ground fog however if fog is not present inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion while smoke that moves upward and rapidly dissipates indicates good vertical air mixing

Sensitive Areas

This pesticide should only be applied when the potential for drift to adjacent sensitive areas (e g residential areas bodies of water known habitat for threatened or endangered species non-target crops) is minimal (e g when wind is blowing away from the sensitive area)

Ground Boom Application

The following mandatory spray drift best management practices are required to reduce the likelihood of off-target drift movement from ground applications

1 Choose only nozzles and pressures that produce a medium or coarse droplet size (255-400 microns volume median diameter) per ASABE Standard 572 See manufacturer s catalog or USDA/NAAA Applicator s Guide for spray size quality ratings
2 Apply with nozzle height no more than 4 feet above the ground or crop canopy
3 Do not apply product when wind speed exceeds 10 mph as measured by an anemometer

Orchard Airblast Application

The following mandatory spray drift best management practices are required to reduce the likelihood of off-target drift movement from airblast applications

1 Nozzles must be directed so spray is not projected above the canopies
2 Apply only when wind speed is 3 to 10 mph at the application site as measured by an anemometer outside of the orchard/vineyard on the upwind side
3 Outward pointing nozzles must be shut off when turning corners at row ends

The applicator should take into account the following best management practices to reduce off-site spray drift This section is advisory and does not supersede mandatory label requirements

1 Number of nozzles nozzle orientation and spray volume air speed and wind direction are key factors in adjusting airblast spray delivery to match the height and density of the crop canopy Airblast equipment should be adjusted to provide uniform coverage while minimizing the amount of spray movement over-the-top or completely through the crop canopy
   High air volumes deliver spray more efficiently than air at high speed Reducing forward travel speed decreases the air speed necessary to deliver the spray to the top of the crop canopy
   Use air guides along with the number and orientation of spray nozzles to achieve the desired spray coverage and directional control
2 The following steps should be taken to minimize drift and the amount of non-target spray
   Orient nozzles and adjust air speed/volume/direction to force the spray through the crop canopy but not allow drift past the canopy
   Shut off spray delivery when passing gaps in crop canopy within rows
   Spray the outside rows of orchards from outside in directing the spray into the orchard and shutting off nozzles on the side of the spray away from the orchard
   When treating smaller trees vines or bushes shut off top nozzles to minimize over the-top spray movement

MIXING DIRECTIONS

To prepare the spray add a portion of the required amount of water to the spray tank and with agitation add this product Complete filling the tank with the balance of water needed Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture

This product may also be used in tank mixtures with insecticides miticides and fungicides and/or with non-pressure fertilizer solutions as specified under specific crop use directions Do not tank mix with alkaline materials such as Bordeaux mixture and lime Prepare tank mixtures in the same manner as specified above for use of this product alone When tank mixtures of this product and herbicides are involved add wettable powders first flowables second and emulsifiable concentrates last Where a fertilizer solution is involved it is strongly recommended that a fertilizer pesticide compatibility agent such as MIX™ Unite® or Compex® be used Maintain constant agitation during both mixing and application to ensure uniformity of the spray mixture Do not allow spray mixtures to stand overnight

Note Test compatibility of the intended tank mixture before adding this product to the spray or tank mix Add proportionate amounts of each ingredient to a pint or quart jar cap shake and set for 15 minutes Formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used

APPLICATION METHODS

By Foliar Broadcast

Apply with conventional power-operated spray equipment using nozzles and spray pressures suited for insecticides Apply this product in a spray volume of not less than 2 gallons per acre for aerial application equipment (fixed wing or helicopter) or not less than 10 gallons per acre for ground equipment unless otherwise specified Increase spray volume to ensure adequate coverage with increased density and height of crop canopy See *SPRAY DRIFT MANAGEMENT* section for recommendations on droplet size

By Ground

Orient the boom and nozzles so that uniform coverage is obtained The swath width should not be wider than the boom Follow nozzle manufacturer s recommendations for insecticide nozzles with respect to nozzle type pressure and spacing

By Soil Broadcast

Apply with conventional power-operated spray equipment that will apply the product uniformly to the soil surface Use nozzles that produce medium or coarse droplets (235 to 400 microns) Use a spray volume of 10 gallons or more per acre unless otherwise stated For band application use proportionally less spray volume

By Air

Use a minimum spray volume of 2 gallons per acre Mark swaths by flagging permanent markers or use of GPS equipment

SPRINKLER IRRIGATION

This product may be applied by sprinkler irrigation for the following crop uses Alfalfa Almonds orchard floors Citrus orchard floors Corn (Field Sweet) Cotton Cranberries Mint Sorghum Soybeans Sugarbeet Pecan and Walnut orchard floors and Wheat

See the use sections for the individual crops for further application information Do not apply this product to the above listed crops through any other type of irrigation system Do not apply this product by chemigation to any other crop

Note Unless otherwise indicated in specific use directions the application rates for chemigation are the same as those specified for broadcast application

Use Directions for Sprinkler Irrigation

The following use directions are to be followed when this product is applied through sprinkler irrigation systems Thoroughly clean the injection system and tank of any fertilizer or chemical residues and dispose of the residues according to State and Federal laws Flush the injector with soap and water Determine the amount of insecticide needed to cover the desired acreage Mix according to instructions in the *MIXING DIRECTIONS* section and bring mixture to desired volume Do not add crop oil when this product is applied by chemigation Continually agitate the mixture containing this product Set the sprinkler system to deliver the desired inches of water per acre Start the water pump and sprinkler and let the system achieve the desired pressure and speed before starting the injector Start the injector and calibrate the injector system according to Number 14 in the *SPECIAL USE PRECAUTIONS* section The mixture containing this product must be injected continuously and uniformly into the irrigation water line as the sprinkler is moving This procedure is necessary to deliver the desired rate per acre in a uniform manner When the application is finished allow the entire irrigation and injector system to be thoroughly flushed clean before stopping the system

Special Use Precautions for Sprinkler Irrigation

The following use precautions will result in a safe and successful application of mixture containing this product

1 Apply this product only through sprinkler irrigation systems including center pivot lateral move end tow side (wheel) roll traveler big gun solid set micro sprinkler or hand move Do not apply this product through any other type of irrigation system Do not apply through sprinker systems that deliver a low coefficient of uniformity such as certain water drive units
2 Crop injury lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water
3 If you have any questions about calibration contact state extension service specialist equipment manufacturers or other experts
4 Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system
5 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
6 The system must contain a functional check valve vacuum relief valve and a low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow Refer to the American Society of Agricultural Engineer s Engineering Practice 409 for more information
7 The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection pump
8 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
9 The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops
10 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
11 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 The metering pump must provide a greater pressure than that of the irrigation system at the point of injection The pump must meet Section 675 for Electrically Driven or Controlled Irrigation Machines NEC 70 and must contain Viton or Teflon seals

12 To ensure uniform mixing of the insecticide into the water line inject the mixture through a nozzle placed in the fertilizer injection port or just ahead of an elbow or tee in the irrigation line so that the turbulence created at those points will assist in mixing It is suggested that the injection point be higher than the insecticide tank to prevent siphoning
13 The tank holding the insecticide mixture should be large enough to allow the system to complete a revolution with one filling It should be free of rust fertilizer sediment and foreign material and equipped with an in-line strainer situated between the tank and the injector pump
14 In order to calibrate the irrigation system and injector to apply the mixture containing this product determine the following
a) Calculate the number of acres irrigated by the system b) Set the irrigation rate and determine the number of minutes for the system to cover the intended treatment area c) Calculate the total gallons of insecticide mixture needed to cover the desired acreage Divide the total gallons of insecticide mixture needed by the number of minutes to cover the treatment area This value equals the gallons per minute output that the injector must deliver Convert the gallons per minute to milliliters or ounces per minute Calibrate the injector pump with the system in operation at the desired irrigation rate It is suggested that the injector pump be calibrated at least twice before operation and the system should be monitored during the operation
15 Do not apply when wind speed favors drift beyond the area intended for treatment End guns must be turned off during the application if they irrigate non-target areas
16 Do not allow irrigation water to collect or run off and pose a hazard to livestock wells or adjoining crops
17 Reentry Follow requirements in the *AGRICULTURAL USE REQUIREMENTS* section or crop-specific sections of this label
18 Do not apply through sprinkler systems that deliver a low coefficient of uniformity such as certain water drive units

APPROVED CROPS

ALFALFA

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product to control the following pests at the dosages indicated below

Pest	This Product (pint/A)
Aphids (blue alfalfa cowpea pea) Spotted alfalfa aphid (suppression not for use in California)	1 to 2
Corn rootworm adults (Spotted cucumber beetle) Leafhoppers Grasshoppers	0 5 to 1
Alfalfa blotch leafminers Alfalfa caterpillars Alfalfa loopers Alfalfa weevil larvae and adults Armyworms Cutworms Egyptian alfalfa weevil larvae and adults Plant bugs Spittlebugs	1 to 2
Alfalfa webworm	1 5

Note Stubble spray may be applied to control Leafhoppers in the Northeast
Apply as a broadcast foliar spray using aircraft or ground spray equipment Use a higher rate in the rate range for increased pest pressure Use a minimum spray volume of 2 gpa for aerial application (fixed wing or helicopter) or 10 gpa for ground equipment Use a spray volume of 5 gpa or more by air or up to 20 gpa by ground when foliage is dense and/or pest population is high and/or under high temperature and wind conditions Some reduction in insect control may be evident under excessively cool conditions
For Egyptian alfalfa weevil control in California apply the specified dosage in a minimum of 5 gallons of water per acre when larvae are actively feeding
This product may also be applied through sprinkler irrigation systems to control the above listed foliar pests Use the specified rate of this product per acre See *SPRINKLER IRRIGATION* section for further information
Do not tank mix this product with other pesticides surfactants or fertilizer formulations unless prior use has shown the combination is non-injurious to Alfalfa under your current conditions of use Some phytotoxic

symptoms may be observed on young tender rapidly growing Alfalfa when treated with this product Alfalfa will outgrow the symptoms and no yield loss should be expected
This product is highly toxic to bees exposed to direct treatment on Alfalfa Do not apply if nearby bees are clustered outside of hives and bees are foraging Protective information may be obtained from your Agricultural Extension service
To avoid contamination of irrigation tail waters do not flood irrigate within 24 hours following an application of this product
RESTRICTIONS *Do not cut or graze treated Alfalfa within 7 days after application of 0 5 pint of this product per acre within 14 days after application of 1 pint per acre or within 21 days after application of rates above 1 pint per acre Do not make more than 4 applications per season or apply more than once per cutting of Alfalfa Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Maximum single application rate is 2 pints of this product (1 lb chlorpyrifos) per acre*

ASPARAGUS

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

For Use Only in Arizona, California, Idaho, Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Oregon, South Dakota, Washington and Wisconsin
Use this product to control the following pests as ground broadcast foliar spray in sufficient water

Pest	This Product (pint/A)
Armyworms Asparagus aphids Asparagus beetles Cutworms Grasshoppers Symphylans	2

For Cutworms it is preferable to apply this product when the soil is moist and worms are active on or near the soil surface Applications may be made during the fern stage for control of Armyworms Grasshoppers Asparagus aphids and Asparagus beetles when field counts or crop injury indicates that damaging pest populations are developing or present For symphylans apply at least two weeks before harvest for optimum control **Note** This product may be applied aerially or with ground equipment for control of Armyworms and Grasshoppers

RESTRICTIONS *Do not make more than one pre-harvest application per season or apply within one day of harvest Do not make more than two post-harvest applications during the fern stage Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Maximum single application rate preharvest or postharvest is 2 pints of this product (1 lb chlorpyrifos) per acre*

CHRISTMAS TREES (Plantations Only)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

For use only on tree plantations in Connecticut, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Vermont, Virginia, Washington and Wisconsin
Use this product at the rate indicated to control the following insects on the Tree varieties listed without serious phytotoxicity Apply as a foliar spray using power-operated ground equipment unless otherwise stated in a minimum of 10 gallons per acre finished spray Use a minimum 10 gallons per acre of finished spray when foliage is dense and/or pest density is high and/or under high temperature and wind conditions

RESTRICTIONS *Do not make more than 3 applications of this product or other products containing chlorpyrifos per season Do not make a second application of this product or other products containing chlorpyrifos within 7 days of the first application Do not allow meat or dairy animals to graze in treated area Do not apply by air*

Tree Variety	Pest	Dosage of This Product
Balsam fir Blue spruce Concolor fir Douglas fir Eastern white pine Fraser fir Grand fir Noble fir Scotch pine White spruce	Adelgids (Cooley Eastern spruce gall) Ants* Aphids Douglas fir needle midge European pine shoot moths European pine sawflies Grasshoppers Gypsy moths Mites (European red spider Twospotted spider [except in WA and OR] Pales weevils (adult) Pine needle midges Pine spittlebugs Plant bugs Spittlebugs Spruce budworms Spruce needleminers Scales (Pine needle Pine tortoise Spruce bud Black pine Striped pine)	2 pts per acre
	SPECIFIC DIRECTIONS Before treating large numbers of other conifer species treat a small block of plants and observed 7 to 10 days for symptoms of phytotoxicity **Note** The user assumes the responsibility to determine whether it is safe to treat other conifer species with this product under commercial growing conditions Do not treat plants under extreme heat and drought stress Apply to foliage in sufficient water to ensure adequate coverage For effective control of adult Spider mites if large numbers of eggs are present apply a second spray 7 to 10 days after initial treatment to control newly-hatched nymphs For Scale control apply when Scale crawlers are active * Excludes ants of significant public health important such as fire ants harvester ants carpenter ants and pharaoh ants	
	Pales weevils	6 pts per 100 gals
	INSTRUCTIONS Apply as a cut stump drench	

CITRUS FRUITS (Grapefruit, Lemons, Oranges, and Other Citrus Fruits)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 5 days unless PPE required for early entry is worn

Use this product at the rates indicated according to the designated geographic area to control the following pests Apply as a concentrate or dilute spray For dilute sprays (greater than 200 gallons per acre) use a spray concentration of at least 0 5 pints of this product per 100 gallons of finished spray Use the lower rates for light infestations and increase the dosage for heavier infestations A petroleum spray oil for use on Citrus trees may be added to dilute spray mixtures only at a rate of up to 1 8 gallons per 100 gallons of water to improve control of Aphids Mealybugs Scale insects and Thrips Do not use this product in combination with spray oil when temperatures are expected to exceed 95°F on the day of application or for several consecutive days thereafter Treat when insects become a problem or in accordance with the local spray schedule recommended by your State Extension Service Specialist

Read and carefully follow all applicable directions restrictions and precautions on labeling for the other products used in combination with this product

PRECAUTIONS Observe local use directions for tankmix combinations especially in regard to applications of this product plus spray oil Do not use penetrating surfactants in tank mixes with this product Consult with a county farm advisor county agency extension service personnel agricultural commissioner or pest control advisor for such information regarding a given locality

Do not apply when trees are stressed by drought or high temperatures To avoid excessive ridging do not apply this product to Citrus from December up to the initiation of bloom Do not tank mix this product with Difolatan 80 Sprills as crop injury may occur

This product is highly toxic to bees exposed to direct treatment and should not be applied when bees are actively visiting the area During the bloom period in California apply from one hour after sunset until two hours before sunrise

RESTRICTIONS *Do not apply more than 2 applications or more than 15 pints of this product (7 5 lbs chlorpyrifos a i) per acre per year Do not make second foliar application within 30 days of the first application Do not treat within 21 days of harvest for applications up to 7 pints of this product per acre nor within 35 days for application of rates above 7 pints per acre Do not allow livestock to graze in treated areas Do not apply more than 8 pints (4 lbs a i) per acre in a single application 12 pints (6 lbs a i) per acre for red scale only in California*

Pest	This Product (pint/A)
AZ CA* California Red scale	8 to 12
AZ CA* Thrips (suppression only) Mealybugs	6 to 12
SPECIFIC DIRECTIONS Do not use this product in combination with spray oil when temperatures are expected to exceed 95°F the day of application or for several consecutive days thereafter * The use of more than 8 pints/A is only allowed in California in the following counties Fresno Kern Kings Madera and Tulare	
FL TX Citrus rust mites*	4 to 7
FL Aphids Grasshoppers** Mealybugs Orange dogs Scales (Black Brown Soft Chaff Florida red Long Purple Snow)	2 to 4
SPECIFIC DIRECTIONS * For Citrus rust mites use a spray concentration of at least 1 pint of this product per 100 gallons of water ** For Lubber grasshoppers effective control is achieved by direct contact of the spray when Grasshoppers are less than 1 inch in length	
FL Citrus psylla	5
SPECIFIC DIRECTION For control of citrus psylla add citrus oil at 2% v/v in a tank mix with this product	
Aphids (including Brown citrus aphid) Avocado leafroller Cutworms Fruittree leafroller Grasshoppers* Katydids Lepidopterous larva Mealybugs Orange dogs Orange tortrix Scales (Black Brown Soft California red Chaff Florida red Long Purple Snow) Thrips Western tussock moth	2 to 7
SPECIFIC DIRECTION * For Lubber grasshoppers effective control is achieved by direct contact of the spray when Grasshoppers are less than 1 inch in length	

SMALL TRANSPLANTED GRAPEFRUIT, ORANGES AND OTHER CITRUS TREES (TX Only)

Use this product to control the following insect pests

Pest	This Product (pint/A)
Aphids Cutworms Fruittree leafroller Katydids Mealybugs Scales (Brown Soft California red Chaff)	7 (max)
SPECIFIC DIRECTION Apply this product at the rate of 1 fluid ounce per 1 gallon of water to point of runoff with a backpack sprayer	

CITRUS ORCHARD FLOORS

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 5 days unless PPE required for early entry is worn

Use this product to control Ant species (except Fire ants harvester ants carpenter and pharaoh ants) by applying the specified dose in 25 or more gallons of water with ground application equipment that will uniformly apply the spray to the orchard floor To control foraging Ants and suppress mounds apply this product to the orchard floor at the rate of 1 5 to 2 pints per acre Repeat as needed For best insect control uniform coverage of the orchard floor is necessary Do not apply where weed growth or other obstructions would impede uniform coverage of the orchard floor Do not apply in tank mixtures with *Evik* herbicide Foliar applications of this product may be made in addition to the orchard floor

This product may also be applied to Citrus orchard floors through sprinkler irrigation systems only if the system uniformly covers the soil surface at the base of the tree For best results use the specified amount of this product per acre See *SPRINKLER IRRIGATION* section for further information

Application with Dry Bulk Fertilizer Most dry fertilizers can be used for impregnation with this product Apply this product at the equivalent broadcast rate using a minimum of 200 lbs per acre of dry bulk fertilizer

Impregnation of Dry Bulk Fertilizer Use a closed rotary drum mixer suitable for blending of dry bulk fertilizer equipped with an internal spray nozzle Add the dry fertilizer to the mixer followed by the appropriate amount of this product After mixing the dry ingredients to ensure uniformity add water through the spray nozzle in an amount sufficient to just dampen the mixture (4 to 8 pints of water per ton of fertilizer) Position the spray nozzle within the mixer to provide uniform coverage of the tumbling mixture of fertilizer and this product Addition of water will cause this product to uniformly adhere to the dry bulk fertilizer Apply immediately bulk fertilizers impregnated with this product not stored Foliar applications of this product may be made in addition to the orchard floor treatments

Compliance with any and all federal and state laws and regulations relating to this product and fertilizer mixture is the responsibility of the person offering such mixture for sale or distribution

RESTRICTIONS *Do not apply last treatment within 28 days before harvest Do not allow meat or dairy animals to graze in treated areas Do not apply more than 3 quarts of this product (3 lbs a i) per acre per year Do not make more than 3 applications of this product or other products containing chlorpyrifos per year (does not include foliar applications to Citrus trees) Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Maximum single application rate is 2 qts of this product (2 lbs a i) per acre*

CRANBERRIES

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product by application as a broadcast foliar spray to control Brown spanworms Cranberry fruitworms Cranberry weevils Cutworms Fireworms and *Sparganothis* fruitworms at the rate of 3 pints per acre Mix the specified dosage in enough water to ensure thorough coverage and apply no less than 5 gallons of spray per acre when using aerial equipment or no less than 15 gallons of spray per acre when using ground equipment For Weevil control apply once at flower bud development (late May early June) and if Weevils are present once after 100% bloom (early- to mid-July) For other Insects treat when field counts indicate damaging insect populations are developing or present Apply only after the Winter flood has been removed To avoid pesticide contamination of flood water make no applications while bogs are flooded

This product may also be applied through sprinkler irrigation systems to control the above listed pests For best results use the specified rate of this product per acre Maintain vigorous tank agitation to assure uniformity of the application through the injection period See *SPRINKLER IRRIGATION* section for further information

RESTRICTIONS *Do not make more than 2 applications of this product or any other chlorpyrifos containing products per season Do not apply within 60 days before harvest Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Maximum single application rate is 3 pints of this product (1 5 lbs a i) per acre*

FIELD CORN, SWEET CORN, CORN GROWN FOR SEED

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

For use to control Aphids Armyworms Billbugs Chinch bugs Common stalk borers Corn borers Corn earworms Corn rootworm adults Cutworms Flea beetle larvae and adults Grasshoppers Grubs Lesser cornstalk borers Symphylans Western bean cutworms and Wireworms

Pre-plant Incorporation Treatment

Use this product at the following rates by application in sufficient water to the soil surface and incorporate into the soil

Pest	This Product (pint/A)
Cutworms Symphylans	2
Billbugs Flea beetle larvae Grubs Seedcorn beetles Seedcorn maggots Wireworms	
Corn rootworm larvae Lesser cornstalk borers	

Use the specified rate in not less than 10 gallons of water per acre and apply as a broadcast spray to the soil surface using suitable power-operated ground spray equipment On the same day of treatment incorporate the insecticide into the top 2 to 4 inches of soil using a disc field cultivator or equivalent equipment
This product may also be applied in tank mixtures with non pressurefertilizer solutions and/or with Eradicane® Sutan® Lasso® Dual® and atrazine herbicides See *MIXING DIRECTIONS* section for further information Read and carefully follow all applicable directions restrictions and precautions on labeling for the other products used in combination with this product

Pre plant, At-plant or Pre emergence Treatment in Conservation Tillage
Use this product at the following rates by application in sufficient water to surface trash and exposed soil

Pest	This Product (pint/A)
Armyworms Cutworms	1 to 2

Use the specified rate in not less than 20 gallons of water per acre and apply as a broadcast spray using suitable power-operated ground spray equipment Use higher rates for residual control
This product may also be applied in tank mixtures with non-pressure fertilizer solutions and/or with paraquat and Roundup® See *MIXING DIRECTIONS* section for further information Read and carefully follow all applicable directions restrictions and precautions on labeling for the other products used in combination with this product

Cultivation Time Treatment
Use this product at the rate of 2 pints per acre to control Corn rootworm larvae Apply this product as a water emulsion on both sides of the row at the base of the plants just ahead of the cultivator shovels Cover the insecticide with soil around the brace roots The best time to apply a basal treatment of a soil insecticide with cultivation is near the beginning of egg hatch A cultivation application of this product may be made in addition to an at planting application of Chlorpyrifos 15G granular insecticide

Post-emergence Treatment
Use this product at the following rate by application in sufficient water to ensure thorough coverage of treated plants

Pest	This Product (pint/A)
Armyworms Aphids Chinch bugs Corn rootworm adults Cutworms European corn borers (see *NOTE*) Flea beetle adults Southern corn beetle Webworms Western bean cutworms	1 to 2
Billbugs Common stalk borers Corn rootworm larvae Lesser cornstalk borers	2
Corn earworms Southwestern corn borers	1 5 to 2
Grasshoppers	0 5 to 1

For aerial application use 2 to 5 gallons of spray per acre Control may be reduced at low spray volumes under high temperature and wind conditions
This product may be tank mixed with products containing glyphosate when application is to be made to glyphosate-tolerant Corn
NOTE DO NOT apply this product by air in Mississippi

The specified dosage will control silk clipping by Corn rootworm adults For European Corn borer control use 1 5 to 2 pints per acre when application is made with power-operated ground or aerial equipment and 1 to 2 pints per acre when application is made through a sprinkler irrigation system See following text for generation specific treatment Treat when field counts indicate that pests are or may become a problem
For best Billbug Chinch bug and Flea beetle control apply with sufficient water to ensure a minimum spray volume of 20 to 40 gallons per acre and 40 psi using ground spray equipment On Corn less than 6 inches tall apply the insecticide spray in a 9- to 12-inch wide band over the row On Corn greater than 6 inches tall apply the insecticide spray using drop nozzles directed to the base of the plant Do not reduce the dosage for banded or directed applications Concentrate the full-labeled dosage rate in the treated zone When Chinch bugs continue to immigrate to Corn over a prolonged period or under extreme pressure a second application of this product may be needed
For control of Corn rootworm larvae apply at cultivation Direct the spray to both sides of the row at the base of the plants just ahead of the cultivator shovels Cover the insecticide with soil around the brace roots A cultivation application of this product may be made in addition to an at-planting application of Chlorpyrifos 15G insecticide
For Aphids Armyworms Corn rootworm adults Corn earworms and Common stalk borer control Cutworms European Corn borers Grasshoppers Lesser cornstalk borers Southwestern Corn borers Webworms and Western bean cutworms apply as a broadcast spray using either aerial (fixed-wing or helicopter) or power-operated ground spray equipment
For Cutworms it is preferable to apply this product when soil is moist and Worms are active on or near the soil surface If ground is dry cloddy or crusty at the time of treatment Worms may be protected from the spray and effectiveness will be reduced If such conditions exist shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment may improve control A second application may be required if damage or density levels exceed the economic threshold for your area Consult your agricultural experiment station or extension service specialist for additional information concerning control practices in your area
For Webworm control shallow incorporation using a rotary hoe or other suitable equipment immediately before or soon after treatment is necessary
For first-generation European Corn borer control treat when 25 to 50 percent of the Corn plants show pinhole feeding or leaf-feeding scars Direct ground applications of this product into the Corn leaf whorls for maximum control potential Scout fields within 5 days after application to determine if a second application is needed University research indicates that achieving greater than 50% control of first-generation European borers with a single liquid insecticide treatment is highly dependent on timing insecticide placement and weather conditions Apply this product for control treatment of second-generation European Corn borers when field counts of egg masses indicate an infestation is present or about to develop
For Southwestern Corn borer control treat when field counts of egg masses indicate pests are or may become a problem A second application may be applied 10 to 14 days later if needed due to reinfestation
For Common stalk borer control treat approximately 11 days after application of Roundup herbicide or after complete burn down with paraquat herbicide (3 to 5 days) Do not use this product in combination with the burn down herbicide for control of Common stalk borers
This product may also be applied through sprinkler irrigation systems as a post-emergence broadcast application to control the above listed foliar insects For best results use the specified rate of this product in a tank mix with 2 pints per acre of non emulsifiable oil Maintain vigorous tank agitation to assure uniformity of this product plus oil mixture throughout the injection period This product may also be applied through sprinkler irrigation systems at the rate of 2 pints per acre to control Corn rootworm larvae Time application to coincide with the appearance of the second instar larvae Maintain vigorous tank agitation to assure uniformity of the application throughout the injection period Apply with enough water to wet the root zone to the depth control that is needed Under saturated soil conditions allow enough soil drying to occur so that an application using a minimum water rate will not produce runoff Consult university extension personnel or other experienced consultants to determine the need to treat and to aid in application timing See *SPRINKLER IRRIGATION* section for further information

RESTRICTIONS *Do not apply within 21 days before harvest of grain or ears Do not apply more than 6 pints of this product (3 lbs chlorpyrifos a i) per acre per season Do not make more than three applications of any product containing chlorpyrifos per season including the maximum allowed of two granular applications at the 1 lb chlorpyrifos a i rate Do not make a second application of this product or other products containing*

chlorpyrifos within 10 days of the first application Maximum single application rate is 2 pints of this product (1 lb chlorpyrifos a i) per acre Do not apply in tank mixes with Steadfast™or Lightning® herbicides If more than 1 lb a i granular chlorpyrifos per acre is applied at-plant (for a maximum of 1 3 lbs a i per acre per season) only one additional application of a liquid containing chlorpyrifos at 1 lb a i per acre is allowed per season for a total of 2 3 lbs chlorpyrifos a i per acre per season

COTTON

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product for control of the following pests in states except AZ and CA at the dosages indicated

Pest	This Product (pint/A)
Beet armyworms Cotton bollworm Cotton budworms Cutworms Pink bollworms Saltmarsh caterpillars Tobacco budworms	1 5 to 2
Cotton aphids Fall armyworms Yellowstriped armyworms	0 5 to 2
Cotton fleahoppers Plant bugs (Lygus Mirids)	0 375 to 1
Grasshoppers Thrips	0 5 to 1
Spider mites	1

Note The specified dosage rate of 0 375 pint per acre will not achieve the high degree of control of the highest label rate but will minimize the damage done by Plant bugs and Cotton fleahoppers and allow the beneficial insects to survive build up and be available to aid in the control of Bollworms infesting Cotton For infestations of Cotton aphids that are difficult to control use a higher dosage within the indicated rate range For Spider mites when large numbers of eggs are present scout the treated area in 3 to 5 days If newly hatched nymphs are present make a follow-up application of a non-chlorpyrifos product that is effective against mites For best results on Bollworms and Budworms scout the fields twice per week and applications made when worms are one-fourth inch or less in length

Use this product for control of the following pests in AZ and CA at the dosages indicated

Pest	This Product (pint/A)
Armyworms Cotton aphids Cotton fleahoppers Lygus Saltmarsh caterpillars Silver whitefly Thrips	1 to 2
Boll weevils Cotton bollworms Cotton leaf perforator (suppression) Cutworms Pink bollworms Spider mites (suppression) Tobacco budworms	2

Note The 2 pint rate will aid in the suppression of Cotton leafperforators and Spider mites

Mix the required dosage with sufficient water to ensure thorough coverage of plants and apply using aerial or power-operated ground spray equipment For aerial application use at least 2 gallons of spray per acre For ground application use sufficient spray volume to ensure thorough coverage of treated plants but not less than 10 gallons of spray per acre Increase spray volume when foliage is dense and/or pest population is high and/or under high temperature and wind conditions Treat when field counts indicate damaging insect populations are developing or present Retreat as necessary to maintain control

This product may also be applied through sprinkler irrigation systems as a post emergence broadcast application to control the above listed foliar pests For best results use the specified rate of this product per acre Maintain vigorous tank agitation to assure uniformity of the application throughout the injection period See *SPRINKLER IRRIGATION* section for further information

For effective control of Spider mites when large numbers of eggs are present apply a second spray 3 to 5 days after initial treatment to control newly hatched nymphs For best results on Bollworms and Budworms it is suggested that fields be scouted twice per week and treatments made when worms are one-fourth inch or less in length

RESTRICTIONS *Do not apply within 14 days before harvest Do not make more than 3 applications of this product or any other chlorpyrifos containing products per crop season Do not apply more than 6 pts (3 lbs a i) per acre per season Do not make a second application of this product or any other chlorpyrifos containing products within 10 days of the first application Do not apply more than 2 pints (1 lb a i) per acre per application Do not allow livestock to graze in treated areas Do not feed gin trash or treated forage to livestock Not for use in Mississippi*

FIGS (CA Only)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days unless PPE required for early entry is worn

Use this product at the rate of 4 pints per acre for control of Driedfruit beetles by application in sufficient water to the soil surface followed by incorporation into the top 3 inches of soil Apply to Fig orchard soil as a dormant application in late Winter prior to Beetle emergence and prior to leaf formation

RESTRICTIONS *Make only one application per year Do not apply within 7 months of harvest Maximum single application rate is 2 lbs a i chlorpyrifos (4 pints of this product) per acre*

GRAPES (East of Rocky Mountains/Continental Divide Only)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product for control of Grape root borers by application just before the pests emerge from the soil Mix 4 5 pints of this product with 100 gallons of water and apply 4 pints of the diluted spray mixture to the soil surface on a 15 square foot area (4 4 ft circle) around the base of each vine Do not allow spray to contact fruit and foliage This product can also be used at prebloom To control climbing Cutworms apply 2 pints of this product as a spray drench ground application in a minimum spray volume of 25 gallons per acre Do not apply after bloom stage of growth For grape Mealybug control in Connecticut Massachusetts and Rhode Island apply 2 pints of this product per acre in a minimum spray volume of at least 50 gallons of water per acre using power-operated ground spray equipment only prior to late budbreak Applications after budbreak may result in transient leaf yellowing (Concords) Do not use in conjunction with soil surface application for Grape borer control

RESTRICTIONS *Do not make more than one application of this product or other chlorpyrifos containing products per season Do not apply within 35 days before harvest Maximum single application rate for soil surface application is 4 5 pints of this product (2 25 lbs a i) per 100 gallons Maximum single application rate for prebloom application is 2 pints of this product (1 lb a i) per acre Not for use in Mississippi*

MINT (Peppermint, Spearmint)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product by application as a broadcast foliar spray to control Cutworms at the rate of 2 to 4 pints per acre and Mint root borers as well as Garden symphylans at the rate of 4 pints per acre Mix the specified dosage in water to give no less than 10 gallons of spray per acre and apply using ground spray equipment For Cutworm control treat during May and June when field counts indicate damaging insect populations are developing or present When larvae are less than three-fourths inch in length use the 2 pint rate When larvae are three-fourths inch or more in length use the higher rate For Garden symphylans apply preplant to the soil surface On the same day of treatment incorporate the insecticide into the top 2 to 4 inches of soil using a disc field cultivator or equivalent equipment For Mint root borer control apply post-harvest when field counts indicate damaging insect populations are developing or present Follow with approximately 1 acre inch of sprinkler irrigation immediately after application to incorporate the insecticide into the soil
This product may also be applied through sprinkler irrigation systems as a post-emergence broadcast application to control the above listed pests For best results use the specified rate of this product per acre

Maintain vigorous tank agitation to assure uniformity of the application throughout the injection period See *SPRINKLER IRRIGATION* for further information

RESTRICTIONS *Do not apply within 90 days before harvest Make only 1 application of this product or other products containing chlorpyrifos during the growing season Do not make more than 1 preplant incorporated application in the Spring Do not use in conjunction with a broadcast foliar application of this product for Cutworm control Make only 1 postharvest application per season of this product or other products containing chlorpyrifos Maximum single application rate is 4 pints of this product (2 lbs a i) per acre Not for use in Mississippi*

ONIONS (DRY BULB)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

At-Plant Soil Drench Application
Use this product to control Onion maggots by application as an in-furrow drench at-plant at the rate of 1 1 fluid ounces per 1 000 linear feet of row based on 18 inch row spacing Use a minimum of 40 gallons of total drench per acre Incorporate to a depth of 1 to 2 inches Do not make more than one application per year

Post-plant Soil Drench Application
This product can also be applied post-plant as an early season directed spray to the base of Onion seedlings or transplants during peak egg laying of Onion maggots Use 2 pints per acre at a minimum of 100 gallons per acre for thorough wetting

RESTRICTIONS *Do not make more than two applications (1 at-plant and 1 post-plant) per year Maximum single application rate is 0 96 fl oz of this product (0 03 lb a i) per 1 000 feet of row at plant and 2 pints (1 lb a i) per acre at post-plant Do not harvest within 60 days of application Do not apply this product by air in Mississippi*

PEANUTS

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

For suppression of Wireworms apply this product at the rate of 4 pints per acre as a pre-plant broadcast spray to the soil surface followed by immediate soil incorporation to a depth of 3 to 4 inches Use a minimum of 10 gallons of total spray per acre

RESTRICTIONS *Do not make more than one preplant application per season Do not harvest within 21 days after treatment Do not feed treated Peanut forage or hay to meat or dairy animals The combined total of preplant and post-plant applications of this product or other products containing chlorpyrifos must not exceed 4 lbs chlorpyrifos a i per acre per season Maximum single application rate is 4 pints of this product (2 lbs a i) per acre Aerial application to Peanuts is prohibited in Mississippi*

SORGHUM

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product for control of the following pests at the dosage indicated as a post-emergence broadcast spray using sufficient spray volume to ensure thorough coverage of treated plants but no less than 15 gpa for ground spray equipment or 2 to 5 gpa for aircraft equipment **Note** Do not apply by air in Mississippi Control may be reduced at low spray volumes under high temperature and wind conditions

Pest	This Product (pint/A)
Armyworms Cutworms Chinch bugs Lesser cornstalk borers	1 to 2
SPECIFIC DIRECTIONS For Chinch bugs and Lesser cornstalk borer apply as a directed spray toward the base of the plant using power-operated ground spray equipment with sufficient water to ensure coverage of an 8 to 12 inch band centered on the row On plants less than 6 inches high apply an 8 to 12 inch band over the row Do not reduce the dosage for banded or directed applications Concentrate the full labeled dosage rate in the treated zone	
Corn earworms	2
European and Southwestern corn borers	1 5 to 2
Grasshoppers Yellow sugarcane aphids and other aphids	0 5 to 1
Greenbugs	0 5 to 2
SPECIFIC DIRECTIONS For infestations of Greenbugs that are difficult to control use a higher dosage within the indicated rate range	
Sorghum midges	0 5
SPECIFIC DIRECTIONS Apply when 30 to 50% of the seed heads are in bloom Repeat at 3 day intervals if necessary	
Webworms	1

Mix the specified dosage in enough water to ensure thorough coverage and apply using suitable aerial or ground spray equipment To minimize chemical injury do not apply this product to drought-stressed Grain sorghum within 3 days following irrigation or rain except where the product is applied in irrigation water Sorghum lines used in seed production fields may be more susceptible to chemical injury Susceptible inbred lines or hybrids are likely to be at greater risk of yield-reducing chemical injury when treated at the higher application rates Do not apply more than 1 pint of this product per acre to Seed sorghum if the additional risk of crop injury is unacceptable

This product may also be applied through sprinkler irrigation systems as a post-emergence broadcast application to control the above listed foliar pests For best results use the specified rate of this product per acre Maintain vigorous tank agitation to assure uniformity of the application throughout the injection period See *SPRINKLER IRRIGATION* section for further information

RESTRICTIONS *The treated crop is not to be used for grain forage fodder hay or silage within 30 days after application of 1 pint of this product per acre or within 60 days after application of rates above 1 pint per acre Do not treat sweet varieties of Sorghum Do not apply more than 3 pints of this product (1 5 lbs a i) per acre per season Do not make more than 3 applications of this product or other chlorpyrifos containing products per season Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Maximum single application rate is 2 pints of this product (1 lb a i) per acre Do not apply by air in Mississippi*

SOYBEANS

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

For use to control Armyworms Bean leaf beetles Corn earworms Cutworms European corn borers Grasshoppers Green cloverworms Lesser cornstalk borers Mexican bean beetles Saltmarsh caterpillars and other Woollybears Southern green stink bugs Spider mites and Velvetbean caterpillars

Soil Treatment

Use this product at the rate of 1 to 2 pints per acre to control Cutworms and Lesser cornstalk borers Mix the specified dosage in a minimum of 10 gallons of spray per acre and apply to the soil surface using suitable ground spray equipment Equivalent rates of insecticide spray required per 100 feet of row for various row spacing are given in the accompanying table For at-plant treatments apply the insecticide over the row in a 4 to 6 inch band in front of the planter shoe or press wheel or after the press wheel followed by a drag chain for light incorporation Do not apply as an in-furrow treatment For post-emergence rescue treatments apply as a

directed spray in a 9 to 12 inch band at the base of the plant To plants under 6 inches high apply over the-top in a 6 to 12 inch band Treat when field counts or conditions indicate that pests are or may become a problem

Fluid Ounces of Spray Required per 100 Feet of Row for Various Row Spacing				
Spray Volume per Acre	**36"**	**32"**	**28"**	**24"**
10 gallons	8 8	7 9	6 9	5 9
15 gallons	13 2	11 8	10 3	8 8
20 gallons	17 6	15 7	13 7	11 8

Foliar Treatment
Use this product at the following rate by application in sufficient water to ensure thorough coverage of treated plants

Pest	This Product (pint/A)
Armyworms Mexican bean beetles Bean leaf beetles Corn earworms Cutworms Potato leafhopper Saltmarsh caterpillars and other Woollybears Soybean aphids Thistle caterpillar (painted lady butterfly)	1 to 2
European corn borers Southern green stink bugs	2
Grasshoppers Green cloverworms Spider mites Velvetbean caterpillars	0 5 to 1

Apply as a broadcast spray using either aerial or ground equipment when field counts indicate damaging Insect populations are developing or present re-treat as necessary to maintain control For effective control of Spider mites when large numbers of eggs are present apply a second spray 3 to 5 days after initial treatment If newly-hatched nymphs are present make a follow-up application of a non-chlorpyrifos product that is effective against mites On determinate Soybeans do not apply more than one application after pod set
This product may also be applied through sprinkler irrigation systems as a post-emergence broadcast application to control the above listed foliar pests For best results use the specified rate of this product per acre Maintain vigorous tank agitation to assure uniformity of the application throughout the injection period See *SPRINKLER IRRIGATION* section for further information

RESTRICTIONS *Do not apply more than 6 pints (3 lbs a i) per acre per season Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Do not make more than 3 applications per year of this product or other products containing chlorpyrifos Maximum single application rate is 2 pints of this product (1 lb a i) per acre Do not apply last treatment within 28 days before harvest Do not allow livestock to graze in treated areas or otherwise feed treated Soybean forage hay and straw to meat or dairy animals Not for use in Mississippi*

STRAWBERRIES

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Soil Treatment
Preplant incorporate this product into the soil at the rate of 4 pints per acre in sufficient water to ensure uniform soil coverage in the Spring for protection of Strawberries against Garden symphylans and Grubs during the following year

Foliar Treatment
Use this product by application as a broadcast foliar spray to control Strawberry bud weevils at the rate of 2 pints per acre Apply in a minimum of 40 gallons of spray per acre when buds first appear and 10 to 14 days later Do not apply after berries start to form or when berries are present

Application After Harvest
Apply as a directed spray to crown of Strawberry plants immediately after harvest and after plants are topped at the rate of 2 pints per acre in a minimum of 100 gallons of water per acre to control Strawberry crown moth Repeat application at 14 to 18 days later if required

PRECAUTIONS Do not tank mix this product with pesticides surfactants or fertilizer formulations unless prior use has shown the combination non injurious under your current conditions and use Phytotoxicity may occur when this product is applied to Strawberries experiencing high temperature and drought stress

RESTRICTIONS *For pre-bloom use only Do not apply after Berries start to form or when Berries are present Preharvest interval is 21 days For preplant application do not make more than 1 application per year of this product or other products containing chlorpyrifos For foliar and postharvest application do not make more than 2 applications per year of this product or other products containing chlorpyrifos For postharvest application do not sprinkle irrigate for 1 week following application Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first foliar application and within 14 days for postharvest application Maximum single application rate is 4 pints of this product per acre (2 lbs a i) for preplant incorporation and 2 pints of this product per acre (1 lb a i) for foliar and postharvest application Not for use in Mississippi*

SUGAR BEETS

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Soil Treatment
Apply at-planting or as a preplant treatment and incorporate to a depth of 1 to 2 inches to reduce feeding damage from early season insects such as Cutworms Do not apply as an in furrow treatment Use 1 pint of this product per planted acre to a 10-inch wide band centered over the row for furrows 30 inches apart (For rows 30 inches apart this is equivalent to 9 2 fl ozs of this product per 10 000 feet of row) For other row widths adjust the spray volume per planted acre in proportion to the length of row actually treated

Post-emergence Treatment
Apply specified rate as a broadcast or banded foliar spray Treat when field counts indicate that damaging insect populations are developing or present
Broadcast Application Apply the specified dosage in water using 2 to 5 gallons per acre of finished spray when using aerial spray equipment or 10 to 30 gallons per acre when using ground spray equipment **Chemigation** This product may be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests See *SPRINKLER IRRIGATION* section for application instructions
Banded Foliar Spray Apply using the below rates within the band in a minimum of 7 gallons of spray volume in a 5- to 7 inch wide band centered over the row Do not reduce the rate for band applications Concentrate the full labeled dosage rate (see band rates in table below) in the treated zone For best results incorporate lightly band-applied treatments either mechanically or with irrigations

Pest	This Product (pint/A)	
	Broadcast Application	Band Application
Grasshoppers	0 5 to 1	—
SPECIFIC DIRECTIONS The low rate will control small nymphs (1st through 3rd instar)		
Leafminers Spider mites	1	0 67
Tarnished plant (Lygus)	1	—
Fall armyworm Yellowstriped armyworm Webworms Aphids	1 to 2	0 67 to 1 33
Beet armyworm	1 5 to 2	1 to 1 33
Cutworms Fleabeetle adults	2	1 33
Sugarbeet root maggot adults*	0 5 to 1	—
SPECIFIC DIRECTIONS Apply anytime from 7 days before until 3 days after peak adult emergence in order to target adults present at time of application based on local field trap monitoring		
Sugarbeet root maggot larvae*	—	1 33 to 2
SPECIFIC DIRECTIONS Use as primary treatment to control Root maggot larvae Base application timing on local field trap monitoring Apply anytime from 7 days before until 3 days after peak adult emergence		
Sugarbeet root maggot larvae*	2	1 33 to 2
SPECIFIC DIRECTIONS Use as a supplemental post emergence treatment following an at plant insecticide application for control of Root maggot larvae Base application timing on local field trap monitoring Apply anytime from 7 days before until 3 days after peak adult emergence		
* **Note** To prevent potential development of insecticide resistance in Sugarbeet root maggot users are encouraged to take the following steps 1) Avoid making more than 2 applications of this product per season when adults are active 2) If an organophosphate insecticide was applied at planting make no more than 1 post-emergence application of this product when adults are active		

RESTRICTIONS *Do not apply within 30 days before harvest of Beet roots and tops Do not make more than 3 applications per season Do not apply more than a total of 6 pints (3 lbs a i) per acre per season Do not allow livestock to graze in treated areas nor harvest treated Beet tops as feed for meat or dairy animals within 30 days after last treatment Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Maximum single application rate is 2 pints of this product (1 lb a i) per acre Not for use in Mississippi*

SUNFLOWERS

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

For use to control Banded sunflower moths Cutworms Grasshoppers Seed weevils Stem weevils Sunflower beetle larvae and adults Sunflower moths and Woollybears

Pre-Plant Incorporation Treatment
Use this product at the following rates by application in sufficient water to the soil surface and incorporate into the soil

Pest	This Product (pint/A)
Cutworms	2 to 4

Use the specified rate in not less than 10 gallons of water per acre and apply as a broadcast spray to the soil surface using suitable power operated ground spray equipment On the same day of treatment incorporate the insecticide into the top 2 to 4 inches of soil using a disc field cultivator or equivalent equipment

Post emergence Treatment
Use this product for control of the following pests at the dosage indicated by application in sufficient water to ensure thorough coverage of treated plants

Pest	This Product (pint/A)
Cutworms	2 to 3
Banded sunflower moths Seed weevils Stem weevils Sunflower beetle larvae and adults Sunflower moths and Woollybears	1 to 1 5
Grasshoppers	1
Tarnished plant bug *(Lygus)*	1 to 2

Apply as a broadcast spray using either aerial (fixed wing or helicopter) or power-operated ground spray equipment when field counts indicate that pests are or may become a problem For Cutworm control a second treatment may be made 7 to 10 days later if needed For Stem weevil control optimal treatment time is within 5 to 7 days after adult Weevils begin to appear For Sunflower moth control make first application during early 1 to 5 percent bloom stage A second treatment may be made 7 days later if needed For Seed weevil control treat when field counts indicate there are 10 to 12 adults per plant for oil crops and 1 to 3 adults per plant on confectionery crops Make additional treatments at successive 10 day intervals if field counts indicate need to re-treat For Sunflower beetle larvae or adult control treat when field counts indicate there are 10 larvae or 1 to 2 adults per seedling Additional treatments may be made at successive 7 to 10 day intervals if field counts indicate need to re-treat For tarnished plant bug *(Lygus)* use a higher rate in the rate range where populations are heavy Apply at the onset of pollen spread or approximately 10% bloom (R 5 growth stage) For best protection make a second application 10 days later Use sufficient water to ensure thorough coverage of treated plants

RESTRICTIONS *Do not apply more than 6 pints of this product per acre per season Do not make more than 3 applications per season Do not apply within 42 days before harvest Do not allow meat or dairy animals to graze in treated areas Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Maximum single application rate is 4 pints of this product (2 lbs a i) per acre for preplant incorporation and 3 pints of this product (1 5 lbs a i) per acre for post-emergence broadcast treatment Not for use in Mississippi*

SWEET POTATOES

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product to reduce the feeding damage caused by populations of *Conoderus* wireworms *Systena* flea beetles and the Sweet potato flea beetle Apply at the rate of 4 pints per acre as a broadcast (overall) spray to the soil surface followed by incorporation Mix the specified dosage with enough water to obtain uniform coverage and apply as coarse spray using suitable ground spray equipment Incorporate the insecticide to a depth of 4 to 6 inches as soon as possible after application by using a rotary hoe disc cultivator or other suitable incorporation equipment Plant the crop in the usual manner no later than 14 days after treatment (any delay in planting will reduce the length of time that this product will protect against feeding damage) This product will not control False wireworms or Whitefringed beetles or other Grubs that attack Sweet potatoes

RESTRICTIONS *Do not make more than one application of this product or any other chlorpyrifos containing products per season Do not harvest within 125 days of treatment Maximum single application rate is 4 pints of this product (2 lbs a i) per acre Do not apply by air in Mississippi*

TOBACCO

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product for pre-plant treatment to control larvae of Cutworms Flea beetles Mole crickets Root maggots and Wireworms Apply 2 pints of this product per acre in not less than 10 gallons of water as a broadcast (overall) spray to the soil surface one week before transplanting Immediately following application incorporate the insecticide into the soil to a depth of 2 to 4 inches using suitable equipment To control the above insect pests and low to moderate populations of Root-knot nematodes in NC SC and VA use this product at the rate of 2 pints per acre To control the above insects and moderate populations of Root-knot nematode in all Tobacco growing regions use 2 pints of this product in tank mix with 8 pints of Nemacur® 3 per acre Read and carefully follow all applicable directions restrictions and precautions on labeling for Nemacur 3 used in combination with this product Apply the specified dosage in not less than 10 gallons of water as a broadcast (overall) spray to the soil surface 24 to 48 hours before bedding and transplanting Immediately following application incorporate into the soil surface 24 to 48 hours before bedding and transplanting Immediately following application incorporate into the soil to a depth of at least 4 inches using suitable equipment Where the nematode species *Meloidogyne arenaria* or *M javanica* are present or high populations of *M incognita* apply Telone® II soil fumigant at the label rate

RESTRICTION *Do not apply more than 2 pints of this product per acre (1 lb a i) per application Do not make more than one application of this product or any other chlorpyrifos containing products per season Do not apply by air in Mississippi*

TREE FRUITS AND ALMONDS (Dormant/Delayed Dormant)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days unless PPE required for early entry is worn

Use this product as a dormant or delayed dormant spray at the rates indicated to control the following Insects on the crops listed While this product may be used without oil oil is can be used to control additional pests such as European red mites and Brown almond mites See specific directions below

Crop	Pest	This Product per 100 Gals of Spray*
Almonds Cherries Nectarines Peaches Pears Plums Prunes	American plum borer Brown almond mite Climbing cutworms European red mite Greater peach tree borer Lesser peach tree borer Mealy plum aphid Peach twig borer Pear psylla adults San Jose scale	0 5 to 1 pt (Use a minimum of 1 5 pts per acre)
Apples**	Climbing cutworms Lygus Oblique-banded leafrollers Pandemis leafrollers Rosy apple aphids San Jose scales	

* Based on 200 to 600 gallons per acre as a dilute spray

** **Specific Use Restrictions for Apple** Only one application of any chlorpyrifos containing product can be made per year The application can be either a prebloom dormant/delayed dormant spray to the canopy or the trunk or a post-bloom application to the lower 4 feet of the trunk For post-bloom application instructions and restrictions on Apples refer to *APPLES (Post bloom Application)* section of this label

For dilute spray tank mix the specified dosage with 1 to 2 gallons of petroleum spray oil with directions for dormant use in 100 gallons of water and spray the entire tree by application to runoff using suitable ground spray equipment (See *ADDITIONAL PRECAUTIONS SPECIFIC FOR CALIFORNIA* section for use in California)

For low volume (concentrate) sprays (less than 200 gallons of spray mixture per acre) use the same amount of this product as for a dilute spray and apply in a manner that will ensure thorough coverage of trees Use the higher dosage of this product for severe infestations Use oil as recommended by your State Agricultural Experiment Station or Extension Service Specialist

PRECAUTIONS Because cold or dry conditions may cause this product plus oil sprays to infuse trees resulting in bud damage or drop do not apply until Winter rains or irrigation has replenished soil moisture such that bark

and twigs are not desiccated Do not use more than 4 pints of this product per acre Avoid contact with foliage in Sweet cherries as premature leaf drop may result

Additional Precautions For California Use a minimum of 100 gallons of total spray volume per acre Do not use more than 1% dormant oil and/or penetrating surfactants in less than 4 year old Almond orchards Use up to 2% Supreme oil with no more than 4 gallons per acre on Almonds Use up to 2% Supreme oil with no more than 6 gallons per acre on Peaches and Nectarines Refer to the University of California pest management guide for Apples Pears Plums and Prunes In orchards with high overwintering populations of European red mite or Brown almond mite use higher spray volumes that allow for the use of higher per acre rates of oil Do not use any adjuvants or surfactants in addition to or as a substitute for a petroleum spray oil in a tank mix with this product Do not apply on Almonds in the following counties in California Butte Colusa Glenn Solano Sutter Tehama Yolo and Yuba

RESTRICTIONS *Make only one application during the dormant/delayed dormant season Do not allow meat or dairy animals to graze in treated orchards Do not use more than 4 pints of this product (2 lbs a i) per acre per season Do not make a soil or foliar application of this product or products containing chlorpyrifos within 10 days of a dormant/delayed dormant application of chlorpyrifos to the orchard*

APPLES (Post-bloom Application)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated area during the restricted entry interval (REI) of 4 days unless PPE required for early entry is worn

Use this product as post bloom application to Apple tree trunk to control borers at the rate indicated below

Pest	This Product (pint/A)
American plum borer Apple bark borer Broad necked root borer Dogwood borer Flatheaded appletree borer Roundheaded apple tree borer Tilehorned prionus	3
SPECIFIC DIRECTIONS Mix with water and apply directly to the trunk from a distance of no more than 4 feet using low volume handgun or shielded spray equipment Do not allow spray to contact foliage or fruit Treat only the lower 4 feet of the apple tree trunk	

RESTRICTIONS *Do not use this product if a prebloom application of this product or any other products containing chlorpyrifos has been made during the year Do not make more than 1 post-bloom trunk application per year Do not apply when wind speed is greater than 10 mph Do not apply within 28 days of harvest Do not allow meat or dairy animals to graze in treated orchards For use only in states East of the Rockies (except Mississippi)*

PEARS (Postharvest Application)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn If unauthorized entry into treated orchard cannot be prevented the orchard shall be posted while treated unharvested fruits remain on the trees

For Use Only in California, Oregon and Washington

Use this product for postharvest control of Codling moth

Apply 4 pints of this product in 100 to 400 gallons of spray per acre using an airblast speed sprayer or other suitable ground spray equipment

RESTRICTIONS *Do not make more than one postharvest application prior to dormancy per year Do not harvest or use treated fruits for food or feed Do not allow meat or dairy animals to graze in treated orchards If unauthorized entry into a treated orchard cannot be prevented then the orchard must be posted with appropriate signs according to the Worker Protection Standard while treated unharvested fruit remains on the tree*

TREE NUTS (Foliar Spray)

Worker Restricted Entry Interval: Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn.

Use this product at the dosage indicated by application as a foliar spray to control pests listed in the following table. Mix the required dosage in sufficient water to ensure thorough and complete coverage of the foliage and crop and apply as a concentrate or dilute spray using conventional, power-operated spray equipment. For dilute sprays applied to Tree nut crops, mix the required dosage in sufficient water to allow for spray to runoff. For concentrate sprays, apply an equivalent amount of this product per acre. Treat when pests appear or in accordance with local conditions. Insect control by aerial application may be less effective than control by ground application because of less coverage. Consult your State Agricultural Experiment Station, Certified Pest Control Advisor or Extension Service Specialist for specific use information in your area.

ALMONDS, FILBERTS, WALNUTS

Use this product at the rates indicated to control the listed pests.

Crop	Pest	This Product (pint/A)
Almonds	Leftfooted plant bug, Navel orange-worms, Peach twig borers, San Jose scales	4
Filberts	Eyespotted bud moths, Filbert aphids, Filbert leafrollers, Filbert worms, Obliquebanded leafrollers, Omnivorous leaftiers, Winter moths	3 to 4
Walnuts	Codling moths, Walnut husk fly, Walnut scales	4

PECANS

Use this product at the rates indicated to control the listed pests.

Pest	This Product (pint/A)
Black margined aphids, Yellow pecan aphids, Spittlebugs	1 to 4 pts.
SPECIFIC DIRECTIONS: For control of yellow pecan aphid and blackmargined aphid, apply in tank mix combination with the specified rate of pyrethroid insecticide labeled for control or suppression of these aphids. To control Spittlebugs, use 2 to 4 pints per acre for concentrate sprays.	
Black pecan aphids, Ant species (except Fire ants, carpenter, harvester and pharaoh ants), Hickory shuckworms, Pecan leaf scorch mites (suppression), *Phylloxera spp.*	2 to 4
SPECIFIC DIRECTIONS: For Ant control, apply as an orchard floor spray. Do not apply where weed growth or other obstructions pre-vent uniform coverage of the orchard floor. For best results against Hickory shuckworms, make 2 applications, 10 to 14 days apart. To suppress Pecan leaf scorch mites, use a preventative program. For best *Phylloxera* spp. control, make 2 applications at 10 day intervals using a minimum of 1 pt. of this product per acre, starting at bud swell.	
Fall webworms, Pecan nut casebearers	1.5 to 4

RESTRICTIONS: *Make no more than 3 total applications per season or other products containing chlorpyrifos on Almonds, Filberts, and Pecans, and no more than 2 applications per season on Walnuts. Do not apply within 14 days of harvest of Almonds, Filberts, and Walnuts, or 28 days of harvest of Pecans. Do not allow livestock to graze in treated orchards. Do not apply more than 8 pints (4 lbs. a.i.) per acre per season as a foliar spray. Do not apply by air in Mississippi.*

TREE FRUITS AND TREE NUTS (Trunk Spray or Preplant Dip)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days unless PPE required for early entry is worn

Apply this product to tree trunks and lower branches using a coarse low-pressure spray to control pests listed in the table below Use the high rate when pest pressure is increased Unless otherwise specified a second application may be made after 2 weeks and a third application may be made after harvest Avoid spray contact with foliage in Sweet cherries as premature leaf drop may result Consult your State Agricultural Experiment Station or Extension Service Specialist for proper application timing for your area

Crop	Pest	This Product (pint/100 Gals)
Cherries	American plum borer Greater peach tree borer Lesser peach tree borer	1 5 to 3
Almonds Nectarines Peaches	Peach tree borers	3
SPECIFIC DIRECTIONS For preplant dip application in Peaches and Nectarines only to control Peachtree borer use this product at the equivalent application rate of 6 pints per 100 gallons of water Dip trees several inches above the grafting bud scar and plant immediately or allow them to dry before returning to storage Do not allow Peach trees to remain in contact with the dip solution For control of Peach tree borer in established trees apply before newly hatched borers enter the tree Use as a coarse low pressure trunk spray and thoroughly wet all bark areas from ground level to scaffold limbs Do not allow spray to contact fruit Consult written recommendations provided by your State Agricultural Experiment Station or Extension Service Specialist for proper time to treat in your area		

RESTRICTIONS *Do not apply within 14 days of harvest of Almonds Peaches and Nectarines or within 21 days before harvest of Cherries Do not make more than 1 chlorpyrifos application per year in Peaches and Nectarines and no more than 3 chlorpyrifos applications per year in Cherries Do not allow meat or dairy animals to graze in treated orchards*

ALMOND, PECAN AND WALNUT (Orchard Floors)

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product to control ant species (except Fire ants carpenter harvester carpenter and pharaoh ants) and pavement ants by applying the specified dose with ground application equipment that will uniformly apply the spray to the orchard floor Do not apply where weed growth or other obstructions would impede uniform coverage of the orchard floor Mow or chemically control weeds before the application of this product Foliar applications of this product may be made in addition to the orchard floor treatment Use when ant activity becomes evident within the orchard since worker ants cease most of their foraging activity at temperatures above 90°F Best results will be achieved with applications made at temperatures below 90°F at the time of application Dosage of this product and spray volume may vary depending on the irrigation method employed in the orchard as follows

Ants (except Fire ant, Carpenter, Pharaoh, and Harvester ants) Control in Sprinkler- or Drip-irrigated Orchards

Apply this product as a broadcast spray to the entire orchard floor using ground spray equipment at 4 to 8 pints per acre in 25 or more gallons of water Use the high rate for heavy infestations and the low rate for light infestations In orchards where Ant activity is concentrated around the irrigation emitters apply the high rate to a 6 to 8 foot band along the drip-irrigation line and the low rate to the rest of the orchard

Ants (except Fire ant, Carpenter, Pharaoh, and Harvester ants) Control in Flood irrigated Orchards

Apply this product at 4 to 8 pints per acre in 25 or more gallons of water to the entire orchard floor using ground spray equipment Apply the high rate to heavily infested areas and the low rate to lightly infested areas Where Ant colonies are abundant only in the berm areas apply this product at 8 pints per treated acre in 50 or more gallons of water to a 6 to 10 foot band along the treeline (berm)

RESTRICTIONS *Do not make more than 2 applications of this product or any other chlorpyrifos containing products per season Do not apply more than 8 pints (4 lbs a i) per season to the orchard floor Do not apply the last treatment within 14 days of harvest Do not allow livestock to graze in treated orchards Do not allow spray to contact fruit or foliage Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application*

TURFGRASS GROWN FOR COMMERCIAL SOD

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use this product to control the pests listed in the following table by application at the specified dosages Dilute this product in water and apply using suitable application equipment For best results moisten the Turf at time of treatment

Pest	This Product	
	Per 1,000 sq ft	**Per Acre**
Ants (except Fire ants Carpenter Harvester and Pharaoh ants) Armyworm (such as Beet Fall Yellowstriped) Centipedes Chiggers Chinch bugs Crickets Cutworms Deer ticks Earwigs European crane fly larvae Fiery skipper Fleas Gnats Grasshoppers Greenbug aphids Green June beetle grubs Leafhoppers Lucerne moth Millipedes Mites (such as Clover Bermudagrass stunt Winter grain) Mosquitoes Pillbugs Springtails Sod webworms (lawn moths) Sowbugs Ticks	0 75 fl oz	2 pts
SPECIFIC DIRECTIONS For Sod webworms delay watering or mowing of the treated area for 12 to 24 hours after treatment		
Billbug adults (such as Bluegrass Denver Hunting)	0 75 to 1 5 fl ozs	2 to 4 pts
SPECIFIC DIRECTIONS For Billbugs spray early in the season just prior to or coinciding with first appearance of adults as recommended by your local Agricultural Extension Service Specialists		
Annual bluegrass weevil (Hyperodes) Black turfgrass *Ataenius* adults Mole crickets	1 5 fl ozs	4 pts
SPECIFIC DIRECTIONS To control Annual bluegrass weevil spray suspected problem areas in mid-April and again in mid-May or as recommended by your local Agricultural Extension Service Specialist For Black turfgrass *Ataenius* adults spray early in the season as recommended by your local Agricultural Extension Service Specialist A repeat application may be needed 1 to 2 weeks later To control Mole crickets in Turfgrass apply this product through high-pressure injection or other suitable subsurface placement application equipment Depending on the application equipment used follow the manufacturer s recommendation for calibration and the volume of spray per acre needed to provide control or as recommended by your local Agricultural Extension Service Specialist For best results apply when young nymphs are active		
White grubs (such as Black turfgrass *Ataenius* European chafer Japanese beetle larvae and Northern and Southern masked chafers)	1 5 to 3 fl ozs	4 to 8 pts
SPECIFIC DIRECTIONS For White grubs spray when grubs are young and actively feeding near the soil surface usually during late July and August or as recommended by your local Agricultural Extension Service Specialist For best results moisten the soil prior to treatment For best results immediately after spraying irrigate the treated area with one-half to one inch of water to wash the insecticide into the thatch and underlying soil		

NON-RESIDENTIAL TURF AND ORNAMENTALS AROUND BUILDINGS AND ROAD MEDIANS

Use Precautions and Restrictions Keep out of fish pools and other bodies of water Do not treat vegetable gardens Do not allow livestock to graze in treated areas Do nto feed treated grass cuttings (hay) or seed screenings to livestock or use hay for livestock bedding Do not use this product in poultry houses

This product may be used to treat evergreens vines flowers shrubs shade and flowering trees non bearing fruit nut and citrus trees found around the perimeters of industrial buildings and road medians infested with pests listed in the following table Apply this product using suitable hand or power-operated spray equipment Ensure complete and uniform coverage Uniform coverage is critical for effective insect and mite control Apply as coarse spray to thoroughly wet both upper and lower leaf surfaces and infested limb and trunk areas Attempt to penetrate dense foliage but avoid over-spraying to the point of excessive runoff Treat when pests appear and repeat at 7 to 10 day intervals if needed For application timing and other specific use information consult your State Agricultural Experiment Station or Extension Service Specialist

Note Environmental factors have significant effects on phytotoxic expression Some varieties of Azaleas Camellias Poinsettias Rose bushes or variegated Ivy have shown varying degrees of phytotoxicity following treatment with this product Before treating large numbers of plants (especially those previously listed) treat first a small block and observe for 7 to 10 days to determine phytotoxic potential

The user assumes responsibility for determining if this product is safe to treat plants under commercial growing conditions

Pest	This Product (pint)	
	Per Acre	Per 100 Gals of Water
Adelgids (Cooley Eastern spruce galls Pine bark) Ants (except Fire ants Carpenter Harvester and Pharaoh ants) Aphids (Apple Chrysanthemum Cottonwood Elm leaf Peach Rose Spirea Woolly) Armyworms (Fall Yellowstriped) Boxelder bugs Canker worms Catalpa sphinx Chiggers (for control in golf courses road medians and industrial sites only) Elm spanworms Grasshoppers Green fruitworms Hornworms Jackpine budworms Juniper webworms Katydids Lace-bugs Leafhoppers Mealybugs Oleander caterpillars Orange tortrix Periodical cicada Plantbugs Poplar tentmaker Psyllids Puss caterpillars Rose chafers Sawflies [exposed (Pin oak Pine Redheaded)] Sowbugs Spittlebugs Spring elm caterpillars Springtails Spruce budworms (Eastern Western) Tent caterpillars (Eastern Western Forest) Thornbug Walnut caterpillars Whiteflies Yellownecked caterpillars	1 to 2	0 5 to 1
Armyworms (Beet) Browntail moth Cutworms Leafhoppers Mahogany webworms Mealybugs Mimosa webworms Oakworms (California Orangestriped Redhumped) Redhumped caterpillars Thrips (exposed)	2	1
Bagworms	1 to 2	0 5 to 1
SPECIFIC DIRECTIONS Treat when bagworm larvae are small and actively feeding		
Beetles	2	1
SPECIFIC DIRECTIONS Apply in the Spring or early Summer to reduce twig and branch feeding by bark beetles		
Beetles (including wood infesting Ambrosia Anobidae Black turpentine Cottonwood leaf Elm leaf European elm bark Flea Fuller rose Japanese June Native elm bark Southern Willow leaf)	2	16*
SPECIFIC DIRECTIONS For preventative treatment apply the spray to the main trunk of trees in the early Spring or when threat of attack exists from nearby infested trees For remedial treatment direct the spray to the main trunk of infested trees when damage occurs but before adult beetles begin to emerge To prevent Native elm bark beetles from overwintering in uninfested trees apply this product to the bottom 9 feet of the trunk Wet the trunk thoroughly but do not spray to runoff Care should be taken to apply the spray right to the base of the root flare Application can be made with either a backpack mistblower or a hydraulic pressure sprayer from Spring through early Fall ***Note** When using the 16 pints per 100 gallon dilution do not exceed 2 pints of this product per acre		

(continued)

(continuation)

Pest	This Product (pint)	
	Per Acre	Per 100 Gals of Water
Borers	2	2
SPECIFIC DIRECTIONS Apply to the trunks and lower limbs of trees and shrubs when the adults begin to emerge Consult your State Agricultural Experiment Station or Extensions Service Specialist for proper time to treat		
Borers (Cottonwood Peachtree)	2	6*
SPECIFIC DIRECTIONS For Peachtree borers apply to flowering trees and shrubs of the genus *Prunus* as a trunk spray before newly hatched larvae enter the trees Apply as a coarse low pressure spray Thoroughly wet all bark areas from ground level to scaffold limbs ***Note** When using the 6 pints per 100 gallon dilution do not exceed 2 pints of this product per acre		
Clearwing moths (Ash Dogwood Lessertree Lilac Oak Rhododendron) Metallic wood (Bronze birch Flathead appletree Two-lined chestnut) Longhorned beetles (Locust Red oak) Leafminers Needleminers (Jeffrey pine Lodgepole pine Spruce)	2	2
SPECIFIC DIRECTIONS Apply uniformly as a coarse low-pressure spray Pheromone traps may aid in detection of adult clearwing moths		
Cranberry girdle larvae	2	2
SPECIFIC DIRECTIONS Direct spray at the base of the tree using 50 gallons of water per acre Irrigate immediately after applications for soil penetration of 1 to 2 inches Treat after egg laying during the Summer		
Fall webworms	1 to 2	0 5 to 1
SPECIFIC DIRECTIONS Direct spray into web and immediately adjacent foliage for control of Fall webworms		
Foliar feeding beetles (Blister leaf Cottonwood leaf Elm leaf Flea Fuller rose Japanese June Willow leaf)	2	1
SPECIFIC DIRECTIONS To control Cottonwood leaf beetle larvae and adults infesting Cottonwoods apply when field counts indicate damaging beetle populations are developing or present		
Leafrollers	1 to 2	0 5 to 1
SPECIFIC DIRECTIONS Spray before leaves are tightly rolled for effective control		
Maple leafcutters	1 to 2	0 5 to 1
SPECIFIC DIRECTIONS Apply as cases are being formed for effective control Do not treat Sugar maple trees intended for Maple syrup production		
Mites (Clover Red spider Southern red Spruce spider Twospotted spider)	1 to 2	0 5 to 1
SPECIFIC DIRECTIONS For effective control of Spider mites when large numbers of eggs are present apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly hatched nymphs		
Moths (Browntail Cypress tip Douglas fir tussock European pine shoot Gypsy Holly bud Nantucket pine tip Pandora Pitch pine tip Subtropical pine tip Tussock)	2	1
SPECIFIC DIRECTIONS To kill migrating and invading Gypsy moth larvae treat trunks and foliage		
Scale insects (Cottonycushion Cottony maple Euonymus Fletcher Florida wax Golden oak Hemispherical Lecanium Magnolia Oak kermes Oak lecanium Oystershell Pine needle San Jose Tea White birch White peach)	2	2
SPECIFIC DIRECTIONS Time applications for control of Scale insects when crawlers or first two stages of settled nymphs are present		
Weevils (Blackvine Pine production Yellow poplar)	2	1
SPECIFIC DIRECTIONS Blackvine weevils are night feeders Late afternoon spraying will maximize control		

FOR ORNAMENTALS [Soil Treatment of Containerized (Potted) or Balled and Burlapped Nursery Stock]

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Use in nurseries is permitted for USDA quarantine purposes only
Treat containerized potted or balled and burlapped nursery stock to control the insects in the soil attached to the roots of these plants Completely submerge the container with drain holes or root balls stabilized by burlap in a tank containing diluted solution of this product Do not remove burlap wrap or plastic containers with drain holes prior to submerging Keep the container or root ball submerged until complete soil saturation has occurred normally about 30 minutes
Use Precautions During all operations (submerging drenching injecting) wear a chemical-resistant apron in addition to other PPE listed for applicators and other handlers Make applications in a well-ventilated area
Note Environmental factors have significant effects on phytotoxic expression This product has been tested on numerous Ornamental plants without causing serious phytotoxicity at specified use rates However because of the numerous varieties grown treat a small group of plants at the specified rate under the anticipated growing conditions and observe for at least 7 days to determine phytotoxic potential before treating a larger number of plants The user assumes responsibility for determining if this product is safe to treat plants under commercial growing conditions

Pest	This Product	
	In 10 Gallons of Water	In 100 Gallons of Water
White grubs	6 6 fl ozs	2 qts *
SPECIFIC DIRECTIONS An alternative treatment to submerging containerized plants is to drench the container with the diluted insecticide solution applying approximately 10 to 12 fl ozs of diluted insecticide solution per gallon of container size (4 to 5 fl ozs per 100 cubic inches of container) Premoisten the container media by irrigation or rainfall before drenching Do not remove container from plants prior to treatment ***Note** Do not exceed 1 quart of this product per acre		
Weevils	6 6 fl ozs	2 qts *
SPECIFIC DIRECTIONS An alternative treatment to submerging balled and burlapped plants is to inject this product into the root ball Equally distribute 1 to 3 quarts of the diluted solution of this product per cubic foot of soil volume through an injection rod inserted into the soil ball surrounding the plant roots Uniform distribution of the insecticide throughout the soil of the root ball is critical for effective control Insert in the injection rod at least 4 equally spaced locations around the stem of the plant at a 30 to 45 degree angle from the plant between the stem and the upper outer perimeter of the ball This technique has been shown to be most effective with small root balls (up to 1 5 feet in diameter) Larger root balls may require more injection points to ensure thorough soil distribution of the insecticide Couple the injection rod to a flow meter to monitor the correct volume applied per root ball using an injection pressure of at least 30 psi Apply in a way that splash back and runoff are minimized * **Note** Do not exceed 1 quart of this product per acre		
Coffee root mealybug	1 6 fl ozs	1 pt
SPECIFIC DIRECTIONS An alternative treatment to submerging containerized plants is to drench the container with the diluted solution applying 10 to 12 fl ozs of diluted insecticide solution per gallon of container size (4 to 5 fl ozs per 100 cubic inches of container) Premoisten the container media by irrigation or rainfall before drenching Do not remove container from plants prior to treatment		
Fire ants	0 4 fl oz	4 fl ozs
SPECIFIC DIRECTIONS As an alternative to submerging potted plants dilute 4 fl ozs of this product in 100 gallons of water Apply this dilution to the point of runoff twice daily for 3 consecutive days Do not remove burlap wrap or container from plants prior to treatment		

ORNAMENTALS IN GREENHOUSES, INDUSTRIAL PLANT SITES AND ROAD MEDIANS

(Dormant Spray of Tree Pests)

[Note to Label Editor Company may delete greenhouse on market label]

This product may be used as a dormant or delayed dormant spray at the rates indicated to control the listed insects This product may be used without oil however oil may be used to control additional pests such as the European red mite For high volume (dilute) spray (200 to 600 gallons of spray mixture per acre) tank mix the specified dosage with 1 to 2 gallons of a petroleum spray oil labeled for dormant use in 100 gallons of water Spray the entire tree to runoff using suitable ground spray equipment

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

USE RESTRICTIONS Do not apply until rain or irrigation have replenished soil moisture such that bark and twigs are not desiccated since cold dry conditions may cause this product plus oil to infuse trees resulting in bud damage or drop Do not apply more than once during the dormant season except for the control of the Apple ermine moth Do not allow meat or dairy animals to graze in treated areas

Pest	This Product		
	In 1 Gallon	In 3 Gallons	In 100 Gallons
Aphids (Mealy plum Rose apple Woolly apple) Borers (Peach twig) Cutworms (Climbing) Leafrollers (Pandemis) Pear psylla adults Plantbugs Scale (San Jose)	1/12 to 1/16 fl oz	1/4 to 1/2 fl oz	0 5 to 1 pt
SPECIFIC DIRECTIONS Tankmix with 1 to 2 gallons of a petroleum spray oil labeled for dormant use in 100 gallons of water			
Apple ermine moth	1/12 fl oz	1/4 fl oz	0 5 pt
SPECIFIC DIRECTIONS For control on *Malus* species make 2 applications at 7 to 14 day intervals in combination with a petroleum spray oil at the rate of 2 to 4% (v/v) in a spray to wet application to ensure thorough coverage of all stems and branches When using tank mixtures follow all label directions for the mixing partner (oil) Use appropriate application equipment and spray volumes to ensure complete coverage of the plant(s) or control will be compromised			

ORNAMENTALS IN GREENHOUSES AND NURSERIES

(Preplant Incorporation Treatment of Field Grown Nursery Stock)

[Note to Label Editor Company may delete greenhouse on market label]

Pest	This Product	
	Per 1,000 sq ft	Per Acre
White grubs White fringed beetles	0 7 fl oz	2 pts
SPECIFIC DIRECTIONS To control White grubs and White fringed beetles during transplant or seedling establishment apply this product to soil and incorporate before transplanting or planting Apply to the soil surface as a broadcast spray using sufficient water to obtain adequate coverage On the same day of treatment incorporate this product into the top 2 to 4 inches of of the soil using a tandem disc field cultivator or equivalent incorporation equipment capable of thorough soil mixing Do not make aerial applications **Use Precautions and Restrictions** Environmental factors and varietal variation can significantly affect the potential for phytotoxicity from pesticide use This product has been evaluated at the above indicated rate on Loblolly pine without phytotoxic effects Prior to making large scale applications prepare and observe a small test plot as above in order to determine the potential phytotoxicity in species or varieties other than Loblolly pine Use the following procedure (1) Treat a small test block as above (2) Seed or transplant the test species or variety and observe for symptoms of phytotoxicity for a minimum of 14 days following emergence or transplanting **Note** The professional user assumes responsibility for determining if this product is safe to treat plants under commercial growth conditions		
Garden symphylans	0 7 fl oz	2 pts
SPECIFIC DIRECTIONS Apply this product as a preplant incorporated treatment to suppress Garden symphylans on land to be planted to field grown ornamentals Apply as a broadcast application to the soil at the maximum rate of 2 pints per acre in at least 10 gallons of water per acre On the same day of treatment incorporate this product to a depth of up to 8 inches using a disc rotovator or other suitable equipment Use the higher rate range for longer residual control or where deeper incorporation is necessary **Use Precautions** Environmental factors significantly affect phytotoxicity This product has been tested on numerous ornamental plants without causing serious phytotoxicity However because of numerous varieties grown treat a small group of plants at the specified rate under the anticipated growing conditions and observe for phytotoxic symptoms for at least 7 days before a large number of plants are treated Do not blend this product with dry bulk fertilizer materials **Note** The user assumes responsibility for determining if this product is safe to treat plants under commercial growth conditions		

ORNAMENTALS GROWN IN NURSERIES*

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 5 days for citrus 4 days for tree fruit and 24 hours for all other ornamentals unless PPE required for early entry is worn

This product may be used to treat shade and flowering trees evergreens (including those grown in conifer seedling nurseries) vines shade and flowering trees and non bearing fruit nut and citrus trees infested with pests listed in the following table Apply this product with suitable hand or power operated spray equipment in a manner to provide complete and uniform coverage Apply as a coarse spray to thoroughly wet both the upper and lower surfaces and to infested limb and trunk areas Attempt to penetrate dense foliage but avoid over spraying to the point of excessive runoff When using spray equipment that delivers less than 200 gallons of spray per acre use the rate specified in the per acre column Apply when pests appear and repeat application at 7 to 10 day intervals as needed Consult your State Agricultural Experiment Station or Extension service Specialist for application timing and other specific use information applicable to your area

Phytotoxicity DO NOT apply under conditions of extreme heat or drought Environmental factors significantly affect phytotoxicity This product has been tested on numerous ornamental plants without causing serious phytotoxicity However because of numerous varieties grown treat a small group of plants at the specified rate under the anticipated growing conditions and observe for phytotoxic symptoms for at least 7 days before a large number of plants are treated The user assumes responsibility for determining if it is safe to treat other ornamental plants using this product under commercial growing conditions

***USE RESTRICTIONS** Use in nurseries is ONLY for wholesale nursery operations Wholesale nursery operations are commercial agricultural operations which DO NOT sell or distribute directly to consumers or the general public through retail sales **PROHIBITION** Selling or distributing treated plants directly to consumers or the general public through retail sales is prohibited

Pest	This Product (fl oz)		
	In 1 Gallon	In 100 Gallons	Per Acre
Adelgids (Cooley Eastern spruce gall Pine bark) Aphids (Apple Balsam twig Black pecan Chrysanthemum Cottonwood Crape myrtle Elm leaf Melon Peach Rose Spirea White pine Woolly Yellow pecan) Boxelder bugs Lace bugs (such as hawthorne) Periodical cicada Cankerworms Catalpa sphinx Citrus mealybugs Plant bugs Psyllid Spittlebugs Thornbug Whiteflies	1/12 to 1/6	8 to 16	16 to 32
Ants* Sowbugs Springtails	1/6	16	32
SPECIFIC DIRECTIONS *Except fire ants harvester carpenter and pharaoh ants			
Bagworms	1/12 to 1/6	8 to 16	16 to 32
SPECIFIC DIRECTIONS Treat when Bagworm larvae are small and actively feeding			
Balsam gall midge Beet armyworms Cutworms Leafhoppers Mahogany webworms Mealybugs Mimosa webworms Oakworms (California Orangestriped Redhumped) Thrips (exposed) Redhumped caterpillars	1/6	16	32
Beetles (Cottonwood leaf Elm leaf Flea Willow leaf)	1/6 to 1/3	16 to 32	32
SPECIFIC DIRECTIONS To control larvae and adults of Cottonwood leaf beetles infesting Cottonwoods apply when field counts indicate damaging beetle populations are developing or are present For seedlings use 8 to 20 gallons of spray volume per acre			
Beetles (Ambrosia Anobiidae Black turpentine Blister Cottonwood leaf Elm leaf European elm bark Fuller rose Japanese June mountain pine Native elm bark Southern pine Spruce Westen pine Willow leaf)	2 2/3	256	-
SPECIFIC DIRECTIONS For preventative treatment spray the main trunk of tree in early Spring or when threat of attack exists from nearby infested trees For remedial treatment spray the main trunk of infested trees or logs when damage occurs but before adult beetles begin to emerge To prevent Native elm bark beetles from overwintering in uninfested trees apply a dilution of 1 gallon per 100 gals of water (1 3 fl ozs per gallon) as a spray to the bottom 9 feet of the trunk Wet the trunk thoroughly but do not spray to runoff Apply the spray to the base of the root flare Applications can be made from the Spring to early Fall To reduce twig and branch feeding on trees deemed to be of high value spray the tree crown using a dilution of 1 gallon per 100 gals of water (1 3 fl ozs per gallon) Apply in the Spring or early Summer using a sprayer that will give thorough coverage to the tree crown			
Beetles (Fuller rose)	1/6	16	32
SPECIFIC DIRECTIONS To reduce foliar feeding on twigs and branches by beetles apply in the Spring or early Summer			
Borers Clearwing moths (Ash Dogwood Lesser peachtree Lilac Oak Rhododendron) Longhorned beetles (Locust Red oak) Metallic wood (Bronze birch Flatheaded appletree Twolined chestnut) Pales weevils adults Zimmerman pine moth	1/3	16	-
SPECIFIC DIRECTIONS Apply this product to the trunks and lower limbs of trees and shrubs when the adults begin to emerge Apply uniformly as a coarse low-pressure spray Pheromone traps may aid in detection of adult clearwing moths Consult your State Agricultural Experiment Station or Extension Service Specialist for proper time to treat in your area			
Borers (Peachtree)	1/3	16	-
SPECIFIC DIRECTIONS For Peachtree borers apply this product in water to flowering trees and shrubs of the genus *Prunus* as a trunk spray before newly hatched larvae enter the trees Apply as a coarse low-pressure spray Thoroughly wet all bark areas from ground level to scaffold limbs Consult your State Agricultural Experiment Station or Extension Service Specialist for proper time to treat in your area			

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Pest	This Product (fl oz)		
	In 1 Gallon	In 100 Gallons	Per Acre
Armyworms (fall yellowstriped) Canker worms Catalpa sphinx Elm spanworms Grasshoppers Greenstriped mapleworms Green fruitworms Hornworms Jackpine budworms Juniper webworms Katydids Lacebugs Oak skeletonizers Oleander caterpillars Orange tortrix Poplar tentmakers Puss caterpillars Rose chafers Sawflies (exposed) [European pine Pin oak Pine Redheaded] Spring elm caterpillars Springtails Spruce budworms (eastern western) Tent caterpillars (eastern forest western) Walnut caterpillars Yellownecked caterpillars	1/12 to 1/6	8 to 16	16 to 32
Fall webworms	1/12 to 1/6	8 to 16	16 to 32
SPECIFIC DIRECTIONS For effective control of Fall webworms direct spray into web and immediately surrounding foliage			
Leafminers Needleminers (Jeffrey pine Lodgepole pine Spruce) Pine needle midge Rhododendron gall midge	1/3	32	32 to 64
Leafrollers	1/12 to 1/6	8 to 16	16 to 32
SPECIFIC DIRECTIONS Spray before leaves are tightly rolled			
Maple leafcutter	1/12 to 1/6	8 to 16	16 to 32
SPECIFIC DIRECTIONS Spray as cases are being formed Do not treat Sugar maple trees intended for Maple syrup production			
Mites (Clover Red spider Southern red Spruce spider)	1/6	16	32
SPECIFIC DIRECTIONS For effective control of Spider mites when large numbers of eggs are present apply a second spray 3 to 5 days in the South or 7 to 10 days in the North after initial treatment to control newly hatched nymphs			
Moths (Browntail Cypress tip Douglas fir tussock European pine shoot Gypsy Holly bud Nantucket pine tip Pandora Pitch pine tip Subtropical pine tip Tussock)	1/6	16	32
SPECIFIC DIRECTIONS To kill migrating and invading Gypsy moth larvae treat trunk and foliage			
Scale insects (Cottony cushion Cottony maple Dearness Euonymus Fletcher Florida wax Golden oak Hemispherical Lecanium Magnolia Oak kermes Oak lecanium Oystershell Pine needle San Jose Tea White birch)	1/3	32	32 to 64
SPECIFIC DIRECTIONS Time applications for control of Scale insects when crawlers or first two stages of settled nymphs are present			
Weevils (Northern pine Pitch eating Twig)	5 1/3	512	-
SPECIFIC DIRECTIONS Treat pine seedlings immediately after transplanting Treat each seedling with enough spray to thoroughly wet the foliage and stem to the point of runoff Do not use more than 6 gallons of spray per acre			
Weevils (Northern pine Pales)	1	96	
SPECIFIC DIRECTIONS Apply as a cut stump spray or drench in Winter or early Spring			
Weevils (Blackvine Pine reproduction Yellow poplar)	1/6	16	32 to 64
SPECIFIC DIRECTIONS Blackvine weevils are night feeders Late afternoon spraying will give control in some areas			
Weevil (Cranberry girdler)	1/6	16	32 to 64
SPECIFIC DIRECTIONS For Cranberry girdler larvae infesting Douglas fir seedlings direct spray at the lower crown and stems using minimum of 50 gals of water per acre Irrigate immediately after application for soil penetration of 1 to 2 inches Treat after egg laying during the Summer			

NON-RESIDENTIAL TURF, INDUSTRIAL PLANT PERIMETERS, AND ROAD MEDIAN OUTDOOR USES

Apply this product to control the pests listed in the following table at the specified dosages and in accordance with the directions given below or as recommended by your local Agricultural Extension Service Specialist Apply this product as a coarse low-pressure spray using suitable application equipment Except as noted thoroughly water immediately after treatment to wash the insecticide into the Turf Moisten the area to be treated at the time of treatment Spray when pests first appear Retreat when needed

Pest	This Product	
	Per 1,000 sq ft	Per Acre
Ant (except Fire ants Carpenter Harvester and Pharaoh ants) Armyworms (Beet Fall Yellowstriped) Chinch bugs Crickets Cutworms Earwigs Fiery skipper Gnats Grasshoppers Greenbug aphids June beetles Leafhoppers Lucerne moths Millipedes Mites (Clover Bermudagrass stunt Formula grass Winter grain) Pillbugs Sowbugs	0 75 fl oz	2 pts
Billbugs adults (such as Bluegrass Denver Hunting)	0 75 to 3 fl ozs	2 pts
SPECIFIC DIRECTIONS Spray early in the season when adult Billbugs first appear		
Chiggers	0 75 fl oz	2 pts
SPECIFIC DIRECTIONS Apply this product for area control of Chiggers infesting Golf course turf Turf in road medians and Industrial plant sites where these pests are present and create a nuisance or a possible public health problem Do not allow public use of treated areas during application or until spray has dried Apply in water at the rate of 0 5 pint per acre (equivalent to 1/6 fl oz per 1 000 sq ft) using a hydraulic sprayer mist applicator knapsack sprayer or other suitable hand- or power-operated spray equipment Treat low underbrush grassy areas weeds and ground surface and debris using enough spray volume to obtain thorough coverage usually 40 to 100 gallons per acre		
Deer ticks	0 75 fl oz	2 pts
SPECIFIC DIRECTIONS Apply in water at the rate of 2 pints per acre or 0 75 fl oz per 1 000 square feet for control of deer ticks Treat low underbrush Turf grassy areas weeds and ground surface and debris using enough spray volume to obtain thorough coverage		
European crane fly	1 fl oz	2 pts
Mole crickets	1 5 fl ozs	2 pts
SPECIFIC DIRECTIONS For Mole crickets in Golf course turf Turf in road medians and industrial plant site turfgrass apply through high pressure injection or other suitable subsurface placement application equipment Depending on the application equipment used follow the manufacturer s specification for calibration and the volume of spray per acre needed to provide control or as recommended by your local Agricultural Extension Service Specialist Apply when young nymphs are active		
Sod webworms (Lawn moths)	0 75 fl oz	2 pts
SPECIFIC DIRECTIONS Delay watering or mowing of the treated areas 24 hours after treatment		
Ticks	0 75 fl oz	2 pts
SPECIFIC DIRECTIONS Apply this product for area control of Ticks infesting Golf course turf Turf in road medians and Industrial plant sites where these pests are present and create a nuisance or a possible public health problem Do not allow public use of treated areas during application or until spray has dried Apply this product in water at the rate of 0 5 pint per acre (equivalent to 1/6 fl oz per 1 000 sq ft) using a hydraulic sprayer mist applicator knapsack sprayer or other suitable hand-or power-operated spray equipment Treat low underbrush grassy areas weeds and ground surface and debris using enough spray volume to obtain thorough coverage usually 40 to 100 gallons per acre		
Ticks (American dog Cattle fever Gulf coast Lone star)	1/4 fl oz	1 5 pts
SPECIFIC DIRECTIONS For control of Ticks treat soil and other areas likely to serve as harborage sites for ticks that have removed themselves from their host Spray surfaces to be treated until wet but do not create excessive runoff **Note** This application is intended as a premise spray only Do not use this as a direct spray on livestock or any sites that may come in contact with livestock		

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Pest	This Product	
	Per 1,000 sq ft	Per Acre
Turfgrass weevil *(Hyperodes)*	1 5 fl oz	2 pts
SPECIFIC DIRECTIONS Make application to problem areas in mid April and again in mid-May or as recommended by your local Agricultural Extension Service Specialist		
White grubs (Black turfgrass ataenius European chafer Japanese beetle larvae Southern and Northern masked chafer)	1 5 to 3 fl ozs	2 pts
SPECIFIC DIRECTIONS Spray when White grubs are young and actively feeding near the soil surface usually during late July and August or as recommended by your Agricultural Extension Service Specialist Immediately after spraying irrigate the treated area with one-half to 1 inch of water to wash the insecticide deep into the thatch or into the underlying soil		

OUTSIDE SURFACES AND AROUND INDUSTRIAL PLANT SITES
(Such as Around Warehouses, Food Processing and Food Manufacturing Sites)

This product may be applied as a residual spray to and around outside surfaces of nonresidential buildings and structures Permitted areas of use include fences pre-construction foundations refuse dumps outside of walls and other areas where pests congregate or have been seen Do not allow adults children or pets to contact treated surfaces until spray have dried Keep out of fish pools and other bodies of water Do not feed treated grass cuttings (hay) or seed screening to livestock or use treated hay for livestock bedding Do not treat vegetable gardens Repeat treatment as needed to maintain effectiveness Unless prohibited by a products label users at their own discretion can tank mix pesticides currently labeled for similar use patterns Always perform a small jar compatibility test using proper proportions to check for physical compatibility prior to tank mixing Do not tank mix this product with product containing dichlorvos (DDVP)

Pest	This Product		
	In 1 Gallon	In 3 Gallons	In 50 Gallons
For Band Treatment			
Ants (except Fire ants Carpenter Harvester and Pharaoh ants) Beetles Boxelder bugs (for other true bugs) Clover mites Crickets Earwigs Elf leaf beetles (adults) Firebrats Millipedes Pillbugs Silverfish Sowbugs Spiders (except Black widow and Brown recluse) Springtails Ticks (for Ticks control in golf courses road medians and industrial plant sites only)	1/4 fl oz	0 75 fl oz	4 fl ozs
SPECIFIC DIRECTIONS To help prevent infestation of non-residential buildings treat a band of soil 6 to 10 feet wide around and adjacent to buildings including the building foundation to a height of 2 to 3 feet where pests are active and may find entrance Use 4 fl ozs of this product per 50 gals of water and apply as a coarse spray at the rate of about 10 gals of spray mixture per 1 000 sq ft to thoroughly and uniformly wet the band area			
For Outside Surface			
Ants (except Fire ants Carpenter Harvester and Pharaoh ants) Beetles Boxelder bugs (for other true bugs) Clover mites Crickets Earwigs Elf leaf beetles (adults) Firebrats Millipedes Pillbugs Silverfish Sowbugs Spiders (except Black widow and Brown recluse) Springtails Ticks (for Ticks control in golf courses road medians and industrial plant sites only)	1 3 fl ozs	13 3 fl ozs	4 pts *
SPECIFIC DIRECTIONS *Do not exceed 2 pints of this product per acre			

VEGETABLES [Brassica (Cole) Leafy Vegetables*, Radish, Rutabaga and Turnip]

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days for Cauliflower and 24 hours for all other vegetables unless PPE required for early entry is worn

***Brassica* (Cole) Leafy Vegetables,** Including Broccoli Broccoli raab Brussels sprout Cabbage Cauliflower Cavalo broccolo Chinese broccoli Chinese cabbage Collards Kale Kohlrabi Mizuna Mustard greens Mustard spinach Rape greens Radish Rutabaga Turnip

RESTRICTIONS *If a preplant incorporation application for direct seeded or transplanted crops is made do not apply this product as an at plant or post plant soil application If an at-plant or post-plant soil application is made do not apply this product as a preplant incorporation application for direct seeded or transplanted crops* Use this product at the dosages indicated to control the pests listed in the following table To avoid phytotoxicity in Vegetables except Brussels sprouts do not mix with other pesticide products or treat plants that are under extreme heat and drought stress

Crop	Pest	Amount of This Product
Preplant Incorporated for Direct Seeded or Tranplanted Crop		
Broccoli Brussels sprout Cabbage Chinese cabbage Collards Kale Kohlrabi Rutabaga Turnip	Billbugs Cutworms Grubs Root maggots Symphylans Wireworms	4 5 pts per acre (1 6 fl ozs per 1 000 sq ft)
Cauliflower		4 pts per acre (1 6 fl ozs per 1 000 sq ft)
Radish		5 5 pts per acre (2 fl ozs per 1 000 sq ft)
	USE DIRECTIONS Apply this product as a broadcast spray to the soil surface using power-operated ground spray equipment Use a total spray volume of 10 gpa or more On the day of treatment incorporate this product into the top 2 to 4 inches of soil using a disc field cultivator or equivalent equipment Insecticides including this product may contribute to the stress of plants under certain environmental conditions This stress may reduce plant stand or interfere with normal plant development Herbicides used preplant incorporated may interact with insecticides and enhance this stress	
At-Plant or Post-Plant Soil Application		
Broccoli Cabbage	Root aphids	1 2 fl ozs per1 000 ft of row for single row plantings and 2 4 fl ozs per 1 000 linear ft of row for double row plantings
	USE DIRECTIONS Apply this product in a water emulsion or with liquid fertilizer injected as a side dress on each side of the row after plants are established Avoid mechanical damage to crop roots Use a minimum of 15 gals of total spray volume per acre See *MIXING DIRECTIONS* of the label for mixing instructions with liquid fertilizers	
RESTRICTIONS Do not apply more than 2 6 pints of this product per acre when planted in 40 inch rows Do not apply more than 4 5 pints of this product per acre to these crops in 20 inch rows (or two rows per bed) Use proportional amounts for other row spacings not to exceed 4 5 pints of this product per acre Do not make more than one application per season within 30 days before harvest Do not make more than one soil application per crop Do not make a foliar application within 10 days of a soil application		

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Crop	Pest	Amount of This Product
Broccoli Brussels sprout Cabbage Chinese cabbage Collards Kale Kohlrabi Turnip	Root maggots	1 6 to 2 75 fl ozs per 1 000 linear ft of row
	USE DIRECTIONS For direct-seeded crops apply the specified dosage in a water-based spray as a 4 inch wide band over the row at planting time Shallow incorporation is necessary Place behind the planter shoe and in front of the press wheel For transplanted crops apply this product as a water-based spray directed to the base of the plants immediately after setting Use a minimum of 40 gals of total spray per acre Do not add any additional adjuvants surfactants or spreader stickers Do not apply as a foliage application	
RESTRICTIONS Do not apply more than 2 6 pts of this product per acre when planted in 40 inch rows Do not apply more than 4 5 pts of this product per acre to these crops in 20 inch rows (or two rows per bed) Use proportional amounts for other row spacings not to exceed 4 5 pts of this product per acre Do not make more than one application per season within 30 days before harvest Do not make more than one soil application per crop Do not make a foliar application within 10 days of a soil application		
Cauliflower	Root maggots	1 6 to 2 4 fl ozs per 1 000 linear ft of row
	USE DIRECTIONS For direct-seeded crop apply the specified dosage in a water-based spray as a 4 inch wide band over the row at planting time Shallow incorporation is necessary Place behind the planter shoe and in front of the press wheel For transplanted crops apply this product as a water-based spray directed to the base of the plants immediately after setting Use a minimum of 40 gals of total spray per acre Do not add any additional adjuvants surfactants or spreader stickers Do not apply as a foliage application	
RESTRICTIONS Do not apply more than 2 pints of this product when planted in 40 inch rows Use proportional amounts for other row spacings not to exceed 4 pts of this product per acre Do not make more than one application per crop within 30 days before harvest Do not make a foliar application within 10 days of a soil application		
Radish	Root maggots	1 fl oz per 1 000 linear ft of row
	USE DIRECTIONS Apply the specified dosage as a water-based drench in the seed furrows with the seed at planting time Use a minimum of 40 gals of total drench per acre	
RESTRICTIONS Do not apply more than 5 5 pts of this product per acre or make more than one application per season Do not make a foliar application within 10 days of a soil application Do not apply within 30 days of harvest		
Rutabagas	Root maggots	1 6 to 3 3 fl ozs per 1 000 linear ft of row
	USE DIRECTIONS Apply the specified dosage in a water-based spray as a 4-inch wide band over the row at planting time behind the planter shoe and in front of the press wheel to achieve shallow incorporation Use a minimum of 40 gals of total spray volume per acre	
RESTRICTIONS Do not apply more than 4 5 pts of this product per acre or make more than one application per crop Do not use Rutabaga tops for food or feed purposes Do not make a foliar application within 10 days of a soil application Do not apply within 30 days of harvest		

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Crop	Pest	Amount of This Product
Foliar Application		
Brussels sprout	Armyworms Cabbage aphids Cutworms Imported cabbageworms Striped flea beetles (adult)	1 to 2 pts per acre
	USE DIRECTIONS Apply this product with conventional power-operated equipment in 20 to 150 gals of water per acre Apply when insects appear on foliage and at 7 to 14 day intervals or thereafter as needed Consult your State Agricultural Station Extension Service Specialist or Integrated Pest Control Advisor for proper time to treat in your area	
RESTRICTIONS Do not make more than 3 applications of this product or any other chlorpyrifos containing products per crop Do not apply within 21 days before harvest Do not make a second application of this product or other products containing chlorpyrifos within 10 days of the first application Do not make a foliar application within 10 days of a soil application		

LEGUME VEGETABLES

(Succulent or dried, except Soybeans) including Adzuki beans, Asparagus bean, Bean, Blackeyed pea, Broad bean (Dry and Succulent), Catjang, Chickpea, Chinese longbean, Cowpea, Crowder pea, Dwarf pea, Edible pod pea, English Pea, Fava bean, Field bean, Field pea, Garbanzo bean, Garden pea, Grain lupin, Green pea, Guar, Gyancinth pea, Jackbean, Lima bean (Dry and Green), Kidney Bban, Lablab bean, Lentil, Moth bean, Mung bean, Navy bean, Pea, Pigeon pea, Pinto bean, Rice bean, Runner bean, Southern pea, Sugar snap pea, Sweet lupin, Swordbean, Tepary bean, Urd bean, Wax bean, White lupin, White sweet lupin, Yardlong bean

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

Preplant Broadcast Application

Apply this product at a rate of 2 pints per acre to control Seed maggots Make a preplant broadcast application in a minimum 10 gpa of spray to the soil surface using suitable ground equipment To improve the activity against Seed maggots this product must be incorporated into the top 1 to 3 inches of soil using suitable tillage equipment

At Plant T Band Treatment

To control Seed Maggots apply 1 8 fl ozs per 1000 ft of row at 30-inch row spacing Apply spray in a 3- to 5 inch wide band over the row behind the planter shoe and in front of the press wheel to achieve shallow incorporation Mix the specified amount of this product in a minimum of 10 gallons of spray per acre and apply to the soil surface using suitable ground sprayer

Incorporate this product into the top one-half to 1-inch of soil using tines or chains or other suitable equipment to improve activity of this product against Seed maggots

The table below gives the equivalent rates of this product required per 100 feet of row for various row spacing

Spray Volume (Gal of water/A)	Fluid ounces of Spray Volume per 100 feet of Row			
	30-inch	28-inch	24-inch	22-inch
10	7 3	6 9	5 9	5 4
15	11	10 3	8 8	8 1
20	14 7	13 7	11 8	10 8

PRECAUTIONS Insecticides including this product may contribute to the stress of the Bean plant under certain environmental conditions which may reduce the plant stand or interfere with normal plant development Preplant incorporated herbicides may interact with insecticides and enhance this stress

RESTRICTIONS *Do not make more than 1 application per year Do not apply more than 2 pints of this product per acre Do not apply this product at-plant if the field is treated with a preplant incorporated treatment of this product Not for use in Mississippi*

WHEAT

Worker Restricted Entry Interval Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours unless PPE required for early entry is worn

For Use Only in Arizona, California, Colorado, Idaho, Kansas, Minnesota, Montana, Nebraska, New Mexico, Nevada, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming

Pest	This Product (pint/A)
Aphids (including Russian wheat aphid Greenbug English grain aphid) Brown wheat mite Grasshoppers	0 5 to 1
USE DIRECTIONS From emergence to flowering treat when 15 to 20% of tillers are infested From flowering to early milk stage treat when 20% or more of tillers are infested	
Army cutworms Other Cutworm species (suppression only) Wheat midge	1
USE DIRECTIONS Control may be reduced under high temperature conditions (greater than 80°F) under dry soil conditions or if larvae are more than one-half inch long Treat when field counts or crop injury indicates that damaging pest populations are developing or present A second application of 1 pint per acre may be made for additional control For control of Wheat midge apply when 75% of the Wheat heads have emerged from the boot and when midge adults are found in the crop (1 midge per 4 to 5 heads) Application timing is critical to ensure good control If possible apply in the late afternoon or early evening when temperatures exceed 50°F and wind speed is less than 7 mph	
Cereal leaf beetle	1
USE DIRECTIONS Target application when eggs are near hatching and larvae emerging as monitored by plant inspection	

Mix the required dosage with water and apply in a minimum of 2 gallons per acre finished spray volume Apply using aerial (fixed wing or helicopter) or power-operated ground spray equipment
This product may also be applied through sprinkler irrigation systems at specified broadcast application rates to control listed foliar pests (see directions above)

RESTRICTIONS *Do not make more than 2 applications of this product or any other chlorpyrifos containing products per crop Do not apply within 28 days of harvest for grain or straw or within 14 days of harvest for forage or hay Do not allow livestock to graze or otherwise feed on treated forage within 14 days of application Do not feed straw from treated Wheat within 28 days of application Maximum single application rate is 1 pint of this product (0 5 lb a i) per acre*

STORAGE AND DISPOSAL

Do not contaminate water food or feed by storage or disposal
PESTICIDE STORAGE Store in a cool dry location Avoid storage at high temperatures Keep container tightly sealed Avoid contamination with acids or alkalies Do not stack more than 2 pallets high to prevent crushing Keep containers away from any source of puncture Store in original container only
Separate pesticides during storage to prevent cross-contamination of other pesticides fertilizer food and feed Preferably lock storage area to prevent admittance by unauthorized or unknowledgeable persons If the container is damaged and leaking or material has been spilled follow these procedures
1 Cover spill with absorbent material
2 Sweep into disposal container

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3 Wash area with detergent and water and follow with clean water rinse
4 Do not allow to contaminate water supplies
5 Dispose of according to instructions below

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

CONTAINER DISPOSAL

Nonrefillable Container (rigid material, less than 5 gals) Nonrefillable container Do not reuse or refill this container Offer for recycling if available Clean container promptly after emptying Triple rinse as follows Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip Fill the container one fourth full with water and recap Shake for 10 seconds Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal Drain for 10 seconds after the flow begins to drip Repeat this procedure two more times Dispose of empty container in a sanitary landfill or by incineration or if allowed by State and local authorities by burning If burned stay out of smoke

Nonrefillable Container (rigid material, 5 gals up to < 250 gals) Nonrefillable container Do not reuse or refill this container Offer for recycling if available Clean container promptly after emptying Triple rinse as follows Empty the remaining contents into application equipment or a mix tank Fill the container one-fourth 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 application equipment or a mix tank or store rinsate for later use or disposal Repeat this procedure two more times Dispose of empty container in a sanitary landfill or by incineration or if allowed by State and local authorities by burning If burned stay out of smoke

Refillable Container (≥ 250 gals & Bulk) Refillable container Refill this container with pesticide only Do not reuse this container for any other purpose Cleaning the container before final disposal is the responsibility of the person disposing of the container Cleaning before refilling is the responsibility of the refiller To clean the container before final disposal empty the remaining contents from this container into application equipment or mix tank Fill the container about 10% full with water Agitate vigorously or recirculate water with the pump for 2 minutes Pour or pump rinsate into application equipment or rinsate collection system Repeat this rinsing procedure two more times

WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable Follow directions carefully Timing and method of application weather and crop conditions mixtures with other chemicals not specifically directed and other influencing factors in the use of this product are beyond the control of the Seller To the extent consistent with applicable law Buyer assumes all risks of use storage and handling of this material not in strict accordance with directions given herewith To the extent consistent with applicable law in no case shall the Manufacturer or the Seller be liable for consequential special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer