

APR - 3 1995

Ms. Beverly Neale  
Helena Chemical Company  
6075 Poplar Avenue, Suite 500  
Memphis, TN 38119

Dear Ms. Neale:

Subject: Amendment - Add Cotton  
End-O-Sulfan 3 E.C.  
EPA Registration Number 5905-418  
Your submission dated July 26, 1994

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(a), is acceptable provided that you:

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
  - a) In the ingredients statement, in the formula name for ENDOSULFAN add "-3-" between "..thiepin" and "oxide" [Do not include the quotation marks appearing around text specified in this letter when preparing your revised labeling]. Also, revise ACTIVE INGREDIENTS to ACTIVE INGREDIENT, since there is only one. Add an asterisk after INERT INGREDIENTS which refers down to a footnote under the ingredients statement which should read "\*Contains Xylene Range Aromatic Solvent".
  - b) Revise the text of the HAZARDS TO HUMANS AND DOMESTIC ANIMALS to read as follows:

Fatal if swallowed. Corrosive. Causes irreversible eye

damage. Do not get in eyes, on skin, or on clothing. May be fatal if inhaled or absorbed through skin. Do not breathe vapor or spray mist. Do not contaminate food or feed. Keep out of reach of domestic animals.

- c) Under the heading **PERSONAL PROTECTIVE EQUIPMENT**, revise the first PPE entry to "Coveralls over long sleeved shirt and long pants", and revise the end of the second entry to "or Viton ≥14 mils.". Change the order of the PPE listing such that the PPE for cleaning equipment, mixing, or loading appears as the last item (i.e., after the respirator requirement) and revise that entry to read:

Add a chemical-resistant apron when cleaning equipment, mixing or loading.

- d) Revise the **Statement of Practical Treatment** to read as follows (retain the Note to Physician in its present form):

**STATEMENT OF PRACTICAL TREATMENT**

**If swallowed:** Call a physician or Poison Control Center immediately. If possible, vomiting should be induced under medical supervision. Drink one or two glasses of water and induce vomiting by touching back of throat with a finger or by giving one (1) ounce of syrup of ipecac, if available. If person is unconscious or convulsing, do not give anything by mouth and do not induce vomiting.

**If inhaled:** Remove victim to fresh air. Apply artificial respiration if indicated. Get medical attention.

**If on skin:** Remove contaminated clothing and wash skin with soap and water. Get medical attention.

**If in eyes:** Flush eyes with plenty of water. Call a physician immediately.

- e) In the **Environmental Hazards**, after "... are important resources." add "Do not contaminate water by cleaning of equipment or disposal of equipment washwaters."
- f) In the **AGRICULTURAL USE REQUIREMENTS**, revise the first PPE entry to "Coveralls over long sleeved shirt and long pants"
- g) After the Container Disposal directions, add the heading **GENERAL INFORMATION** and under this heading add "Not for use or storage in or around the home. Do not use in undiluted

form. In the next paragraph, after "...for good control" add "For ground application, apply recommended amount of pesticide in a minimum of 10 gallons of water per acre on vegetable or row crops, unless otherwise noted.

h) Delete the heading **GENERAL INFORMATION** form above the crop entry **Alfalfa**. Since the label appears to be divided into two separate alphabetical listings for vegetables and fruits (with three errors in alphabetical listing - Celery after Cotton, Grapes after Plums, and Pears after Plums; and Strawberries appearing in the vegetable listing), add the heading **Vegetable and Field Crops** over **Alfalfa**, and the heading **Fruits** above **Apples**.

i) For **Alfalfa**, add **NOTE:** before "Do not apply more than..". After "...or shipped interstate" add the following: Do not make more than 3 applications per year. Do not exceed a maximum of 0.75 lb. active ingredient (i.e., 1 quart) per acre per year.

j) Revise the entry for **Beans** to read as follows:

**BEANS, Succulent and Dry (except Lima Beans)(3): Black Bean Aphid, Bean Leafsketonizer, Cucumber Beetles, Green Stink Bugs, Mexican Bean Beetle - 2/3 to 1 1/3 quarts per acre. Western Bean Cutworm - 1 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. NOTE: Do not feed treated threshings or allow livestock to graze in treated fields. Do not use on Lima Beans that are to be removed from the fields for processing. For all uses, do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.**

k) For **Broccoli**, etc, revise the first rate to read "1 to 1 1/3 quarts per acre." After the second rate (i.e., for **Armyworms, Cutworms**), add the following text and note: Make applications when insects appear or feeding is noticed. **NOTE:** For all uses, do not make more than 4 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

l) Revise the directions for use on **Carrots** to read as follows: **Green Peach Aphid - 2/3 to 1 1/3 quarts per acre. Make application when insects appear or feeding is noticed. NOTE: Do not use tops for food or feed. Do not make more than one application per year. Do not exceed a maximum of**

1.0 lb. active ingredient (i.e., 1 1/3 quarts) per acre per year.

- m) Relocate the crop Celery to appear before Cotton and revise the Celery directions to 2 separate entries as follows:

**CELERY (4): Green Peach Aphid, Cabbage Looper - 2/3 to 1 1/3 quarts per acre. Make application when insects appear or feeding is noticed. NOTE: For all uses, do not make more than one application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/3 quarts) per acre per year.**

**CELERY (7): Green Peach Aphid - 2/3 quart per acre. Make applications when insects appear or feeding is noticed. NOTE: Do not make more than 2 applications per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/3 quarts) per acre per year.**

- n) For the crop Cotton, delete the PHI "(0)", this is misleading, since applications cannot be made after bolls open. After "...surfactant is recommended, add NOTE:.. Also, revise "Do not exceed..." to read "For all uses, do not exceed..."

- o) For the crops Cucumbers, Melons, Summer & Winter Squash revise the PHI for each of these crops from 0 days to 2 days. Revise the directions for these crops to read as follows: 2/3 to 1 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. For Squash Vine Borer control, apply weekly to flower buds, stems, and vines beginning when moths first appear. For Cabbage Looper and Omnivorous Leafroller on melons, use 1 1/3 quarts per acre NOTE: For all uses, do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

- p) Revise the entry for Eggplants to read as follows:  
**Eggplant (1): Colorado Potato Beetle, Flea Beetle, Green Peach Aphid - 2/3/ to 1/ 1/3 quarts per acre. Whitefly - 1 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. NOTE: For all uses, do not make more than 2 applications per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/3 quarts) per acre per year.**

- q) Revise the directions for Lettuce to read as follows:  
 1 to 1 1/3 quarts per acre. Make applications when insects

appear or feeding is noticed. **NOTE:** On Head Lettuce: For all uses, do not make more than 3 applications after thinning. Remove wrapper (outside) leaves at harvest. On Leaf Lettuce: For all uses, do not make more than 2 applications per year. Do not feed crop refuse to livestock. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

r) Revise the directions for **MUSTARD GREENS** to read as follows: 1 to 1 1/3 quarts per acre. Make application when insects appear or feeding is noticed. **NOTE:** For all uses, do not make more than one application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/3 quarts) per acre per year.

s) Revise the PHI for **Peas** from 0 days to 5 days and revise the directions to read as follows: 2/3 to 1 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. **NOTE:** Use only on peas to be harvested by combine. Do not feed treated vines to livestock or allow livestock to graze in treated fields. For all uses, do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 2 2/3 quarts) per acre per year.

t) Revise the **Peppers** directions to 2 separate entries as follows:

**PEPPERS (1): Green Peach Aphid, Flea Beetles, Hornworm, Pepper Maggot - 2/3 quart per acre. Make applications when insects appear or feeding is noticed. NOTE: For all uses, do not make more than 2 applications per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/3 quarts) per acre per year.**

**PEPPERS (1): Green Peach Aphid, Flea Beetles, Hornworm, Pepper Maggot - 2/3 to 1 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. NOTE: For all uses, do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 2 2/3 quarts) per acre per year.**

u) Revise the PHI for **Potatoes** from 0 days to 1 day and revise the entry to read as follows:  
**POTATOES (1): Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leafhopper, Potato Flea Beetles, Potato Leafhoppers, Potato Tubeworm, Threelined Potato Beetle - 2/3 to 1 1/3 quarts per acre. Whitefly - 1 1/3 quarts per acre. Make applications when insects appear or feeding is**

noticed. **NOTE:** For all uses, do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

- v) Revise the directions for **Safflower** to read as follows:

**Green Peach Aphid** - 1 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. **NOTE:** Do not apply after flower heads open. Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 2 2/3 quarts) per acre per year.

- w) Revise the directions for **Spinach** to read as follows:

**Crown Mite, Green Peach Aphid** - 1 1/3 quarts per acre. Make application when insects appear or feeding is noticed. **NOTE:** For all uses, do not make more than one application per year. Do not exceed a maximum of 1.0 lb. active ingredient (i.e., 1 1/3 quarts) per acre per year.

- x) Relocate the directions for use on **Strawberries** to the appropriate alphabetical location under the heading **FRUITS**. Revised text for this crop is given below (see item gg).

- y) Revise the directions for **Sugar Beets** to read as follows: 2/3 to 1 1/3 quarts per acre. Make application(s) when insects appear or feeding is noticed. Make 1 or 2 applications per year as needed for control. **NOTE:** Do not feed treated tops to livestock. Do not make more than 2 applications per year. Do not exceed a maximum of 2.0 lbs. active ingredient (i.e., 2 2/3 quarts) per acre per year.

- z) Revise the PHI for **Sweet Corn** from 0 days to 1 day and revise the entry to read as follows:

**SWEET CORN, Fresh Vegetable Use only (1): Corn Leaf Aphid** - 1 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. **Corn Earworm** - 1 1/3 quarts per acre. Apply when silks first appear and continue until they begin to dry. Allow 5 days between applications. **NOTE:** Do not apply to sweet corn to be processed. Do not feed treated forage or ensilage to livestock or allow livestock to graze in treated fields. For all uses, do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

- aa) Revise the PHI for **Sweet Potatoes** from 0 days to 1 day and

revise the entry to read as follows:

**SWEET POTATOES (1): Sweet Potato Flea Beetle** - 2/3 quart per acre. Begin applications shortly after transplanting or as soon as flea beetles appear. **NOTE:** Do not feed cull potatoes to livestock or allow livestock to graze in treated fields. Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre per year.

- bb) Revise the PHI for Tomatoes from 1 day to 2 days and revise the entry to read as follows:

**TOMATOES (Field and Greenhouse) (2): Blister Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid, Tomato Hornworm** - 2/3 to 1 1/3 quarts per acre. **Tomato Russet Mite, Tomato Fruitworm, Yellowstriped Armyworm, Whitefly** - 1 1/3 quarts per acre. **Cabbage Looper, Stink Bug** - 1 to 1/3 quarts per acre. **Whitefly** - 2/3 quart per 100 to 200 gallons of water. Make applications when insects appear or feeding is noticed. **NOTE:** For all uses, do not make more than 6 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

- cc) Under the new heading **FRUITS**, revise the PHI for **Apples** from 30 days to 21 days and revise the entry to appear as follows:

**APPLES (21): Aphids (Apple, Rosy Apple, Woolly Apple), Apple Rust Mite** - 2/3 quart per 100 gallons of water or a maximum of 3 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. If necessary, prior to petal fall, use 1 quart per 100 gallons to control Apple Aphid and Rosy Apple Aphid. **NOTE:** Do not feed pomace from treated apples to livestock. Do not feed cull fruits to animals or allow livestock to graze in treated orchards. For all uses, do not make more than 2 applications during the fruiting period. Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

- dd) Revise the directions for **Cherries** to read as follows:  
**Plum Rust (Nursery) Mite** - 2/3 quart per 100 gallons or 2 2/3 to 3 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. **NOTE:** Do not feed cull fruits to animals or allow livestock to graze in treated orchards. Do not make more than 2 applications per

year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

- ee) Relocate Grapes to appear after Cherries, and revise the directions to read as follows:

Grape Leafhopper, Rose Chafer - 2/3 quart per 100 gallons or 1 1/3 to 2 quarts per acre. Make applications when insects appear or feeding is noticed. NOTE: Do not apply to Concord variety as severe injury is likely to occur. Ground application is preferred. Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

- ff) Revise the directions for Peaches, Apricots, and Nectarines to read as follows:

Aphids (Black Cherry, Black Peach, Green Peach, Rusty Plum), Catfacing Insects (Stink Bug type), Peach Silver Mite, Peach Twig Borer - 2/3 quarts per 100 gallons or a maximum of 3 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. Lesser Peach Tree Borer - Best control is obtained with a single application post-harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs. NOTE: Do not feed cull fruits to animals or allow livestock to graze in treated orchards. Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

- gg) Relocate Pears to appear after Peaches, Apricots, and Nectarines, and revise the entry to read as follows:

PEARS (7): Consperse Stink Bug (soil treatment) - 2/3 quart per 100 gallons; 200 to 400 gallons of spray per acre applied to orchard floor and ground around trees prior or bloom. Consperse Stink Bug (foliar treatment), Pear Rust Mite - 2/3 quart per 100 gallons or 2 2/3 to 3 1/3 quarts per acre. Make applications when insects appear or feeding is noticed. Stink Bugs must be wet by spray to obtain control. Pear Leaf Blister Mite - 1/3 to 2/3 quart per 100 gallons. Apply as a post harvest or dormant treatment. Pear Psylla - 3 1/3 quarts per acre. Apply in a minimum of 10 gallons of water for aerial application or in 300 gallons of water for dilute application. Apply when adults are first observed or nymphs are small and repeat to maintain control. NOTE: Do not feed cull fruits to animals or allow livestock to graze in treated orchards. Do not make more



than 2 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year. Aerial application may not result in satisfactory control and should only be employed if impossible to apply by ground.

- hh) Revise the directions for Plums and Prunes to read as follows:

**Peach Tree Borer, Lesser Peach Tree Borer** - 1 quart per 100 gallons or 2 2/3 to 3 1/3 quarts per acre. Best control is obtained with a single application post-harvest during the first week of September. Spray all bark areas from ground level to lower scaffold limbs. NOTE: Do not allow livestock to graze on orchard crops or grasses in treated areas. Do not make more than 2 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

- ii) Relocate Strawberries from the Vegetable and Field Crops listing and revise the directions to read as follows:

**Cyclamen Mite** - 2 2/3 quarts per acre in 400 gallon of water. Make applications when insects appear or feeding is noticed. Thoroughly wet the foliage, stem, and crown of the plant. For multiple applications, do not apply at intervals less than 35 days when fruit is present.  
**Meadow Spittlebug, Strawberry Aphid, Tarnished Plant Bug** - 1 1/3 quarts per acre in 200 gallons of water. Make applications when insects appear or feeding is noticed. Do not reapply within 15 days, or more than twice during a 35-day period when fruit is present. NOTE: Do not make more than 3 applications per year. Do not exceed a maximum of 3.0 lb. active ingredient (i.e., 4 quarts) per acre per year.

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

- 3) Submit three (3) copies of your final printed labeling before you release the product for shipment. Finished revised amended labeling should be prepared in a timely manner to be available for use, hopefully, on this Spring's production run since several of the crop entries previously had shown insufficient preharvest intervals.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section

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6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Sincerely,

George T. LaRocca  
Product Manager (13)  
Insecticide-Rodenticide Branch  
Registration Division (7505C)

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Amendment Submitted 7/26/94

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ACCEPTED  
with COMMENTS  
in EPA Letter Dated

# END-O-SULFAN 3 E.C. INSECTICIDE

APR - 3 1995

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
5905-418

**ACTIVE INGREDIENTS:**

**BY WEIGHT**

Endosulfan (Hexachlorohexahydromethano-2,4,3-benzodioxathiepin oxide) ..... 33.70%

**INERT INGREDIENTS:** ..... 66.30%

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

This Product Contains 3 pounds Endosulfan Per Gallon

**KEEP OUT OF REACH OF CHILDREN**

**DANGER - POISON**

**PELIGRO**

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

**SEE INSIDE FOR ADDITIONAL PRECAUTIONS**

EPA REG. NO. 5905-418

RQ ENDOSULFAN, MIXTURE,  
LIQUID, POISON B, NA2761

First letters of batch code indicate producing establishment:

- 5905-FL-1=TF      5905-GA-1=CG
- 5905-AR-1=WA      5905-OK-1=AO
- 5905-TX-2=AT      5905-CA-1=KC
- 5905-LA-3=DL

NET CONTENTS:

**MANUFACTURED BY  
HELENA CHEMICAL COMPANY  
MEMPHIS, TN 38119**

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**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS (AND DOMESTIC ANIMALS)  
DANGER**

Fatal if swallowed. May be fatal if inhaled or absorbed through the skin. Do not breathe vapors or spray mist. Causes eye damage. Do not get in eyes, on skin or on clothing.

**PERSONAL PROTECTIVE EQUIPMENT**

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

**Applicators and other handlers must wear:**

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves, such as Barrier Laminate or Viton.
- Chemical-resistant footwear plus socks
- Protective Eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing or loading
- A respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G)

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

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

**USER SAFETY RECOMMENDATIONS**

**Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**STATEMENT OF PRACTICAL TREATMENT**

**If swallowed:** Call a physician or Poison Control Center immediately. If possible, vomiting should be induced under medical supervision. Drink one or two glasses of water and induce vomiting by giving one (1) ounce of syrup of ipecac, if available, or by touching the back of throat with a finger. Do not induce vomiting or give anything by mouth to a person who is unconscious or convulsing.

**If inhaled:** Remove victim to fresh air. Apply artificial respiration if indicated.

**If on skin:** Remove contaminated clothing and wash skin with soap and water.

**If in eyes:** Flush eyes with plenty of water. Call a physician immediately.

**Note to Physicians:** Endosulfan is a central nervous system stimulant absorbable by mouth, inhalation or through contact with skin. It may cause convulsions. There is no specific antidote. Diazepam I.V. is the drug of choice. Barbituric acid derivatives such as Phenobarbital may be used additionally. A neuromuscular blocking agent may be used if convulsions persist. This type of drug may be used only if complete control of respiration can be maintained. Epinephrine derivatives are absolutely contraindicated.

**For Emergency Assistance Call 901-761-0050.**

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish, birds, and other wildlife. Birds feeding on treated areas may be killed. Do not apply directly to water or wetlands. Due to the risk of runoff and drift, do not apply within a distance of 300 feet of lakes, ponds, streams, and estuaries. Shrimp and crab may be killed at applications rates recommended on this label. Do not apply where fish, shrimp, crab and other aquatic life are important resources. This product may not be used in areas where impact on threatened endangered species is likely. Contact your State Fish and Game Agency before applying this product. Apply this product only as specified on this label.

This pesticide is toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning.

**PHYSICAL OR CHEMICAL HAZARDS**

Do not use, pour, spill or store near heat or open flame.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product through any type of irrigation system. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants
- Chemical-resistant gloves such as Barrier Laminate or Viton.
- Chemical-resistant footwear plus socks
- Protective Eyewear
- Chemical-resistant headgear for overhead exposure

**STORAGE AND DISPOSAL**

**Pesticide Storage - Do not store in or around the home.**

Do not store below 20°F, (-7°C).

Do not use or store near heat, open flame or hot surfaces.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food and drink containers. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills.

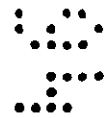
To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

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

**Container Disposal - Triple rinse (or equivalent) then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Do not cut or weld metal containers.**

Apply the listed amount per acre when insects first appear and repeat as required to maintain effective control. Use in sufficient water for thorough coverage, unless other wise noted for listed crops. Coverage of upper and lower leaf surfaces is essential for good control. Observe use limitations. If insect control is required beyond the following use patterns, supplement the control program with other suitable pesticides. When applying this material by aircraft, mix the recommended amount with sufficient water to provide a minimum of 1 gallon finished spray per acre. When more than 2 quarts of this material are recommended, mix with sufficient water to provide a minimum of finished spray equal to twice the amount of End-O-Sulfan used. Do not plant root crops other than carrots, potatoes, sweet potatoes, and sugar beets as follow-up crops. Observe days intervals between last applications and harvest indicated by number in ( ) following the crop.

**DO NOT APPLY THIS PRODUCT THROUGH ANY TYPE OF IRRIGATION SYSTEM.**



### GENERAL INFORMATION

**ALFALFA, Grown for Forage (21):** Meadow Spittlebug - 2/3 pint per acre. Apply 1 week after the eggs begin to hatch or when first small masses of froth are produced in the crowns of the plant which is usually about the time the alfalfa is 4 to 6 inches tall. Apply in a minimum of 10 gallons of water per acre by ground or 2 gallons of water per acre by air. Do not apply more than once per cutting. Do not graze or cut forage within 21 days of treatment. Do not feed forage to dairy or meat animals. Do not use on forage to be sold commercially or shipped interstate.

**BEANS, Succulent and Dry (except Lima Beans) (3):** Black Bean Aphid, Bean Leafskeltonizer, Cucumber Beetles, Green Stink Bugs, Mexican Bean Beetle - 1-1/3 to 2-2/3 pints. Western Bean Cutworm - Use 1-1/3 quarts. Do not exceed 3 applications per season. Do not feed threshings or allow livestock to graze in treated fields.

**BROCCOLI (7), BRUSSELS SPROUTS (14), CABBAGE (7), CAULIFLOWER (14):** Cabbage Aphid, Cabbage Looper, Cross-Striped Cabbageworm, Diamondback Moth Larvae, Flea Beetle, Harlequin Bug, Imported Cabbageworm, Stink Bug - 1 to 1-1/3 quarts. Armyworms, Cutworms - 1-1/3 quarts per acre.

**CARROTS (7):** Green Peach Aphid - 1-1/3 to 2-2/3 pints. Do not exceed 2 applications per season. Do not use tops for food or feed.

**COTTON (0):** Aphids - 1/2 to 1 quart per acre. Boll Weevil - 2/3 to 2 quarts per acre. Bollworm, Cabbage Looper, Cotton Leafperforator, Cotton Leafworm, Fleahoppers, Lygus Bugs, Stink Bugs, Tobacco Budworm - 1-1/3 to 2 quarts per acre. Thrips - 2 quarts per acre. Make applications when insects appear or feeding is noticed. For control of aphids, thorough coverage is important. The addition of a nonionic surfactant is recommended. Applications may be made using ground or aerial application equipment. The higher rate should be used under heavy pest pressure. Do not apply after bolls open. Do not graze dairy or meat animals in treated fields. Do not exceed a maximum of 3.0 lbs. active ingredient (i.e., 4 quarts) per acre.

**CELERY (7):** Green Peach Aphid - 1-1/3 pints. \*(4) Green Peach Aphid, Cabbage Looper - 2-2/3 pints. Do not exceed 3 applications per season.

**CUCUMBERS (0), MELONS (0), SUMMER & WINTER SQUASH (0):** Aphids, Cucumber Beetles, Striped Flea Beetle, Melonworm, Pickdeworm, Rindworm (on watermelons), Squash Beetle, Squash Bug, Squash Vine Borer - 1-1/3 to 2-2/3 pints. For Vine Borer control, apply weekly to flowerbuds, stems and vines beginning when moths first appear. For Cabbage Looper and Omnivorous Leafroller on melons, use 1-1/3 quarts.

**EGGPLANTS (1):** Colorado Potato Beetle, Flea Beetle, Green Peach Aphid, Whitefly - 1-1/3 pints per acre.

**LETTUCE (14):** Cabbage Looper, Green Peach Aphid, Diamondback Moth Larvae, Imported Cabbageworm - 1 to 1-1/3 quarts. Do not exceed 3 applications per season after thinning head lettuce and remove outside leaves at harvest. Do not exceed 2 applications per season on leaf lettuce. Do not feed refuse to livestock.

**MUSTARD GREENS (21):** Aphids, Cabbage Looper, Imported Cabbageworm - 1 quart per acre. Do not exceed 1 application per season.

**PEAS, Succulent (0):** Pea Aphid, Pea Weevil - 1-1/3 to 2-2/3 pints per acre. Do not exceed 2 applications during the fruiting period. Use only on peas to be harvested by combine. Do not feed treated vines to livestock or allow livestock to graze in treated fields.

**PEPPERS (4)\*:** Green Peach Aphid, Flea Beetles, Hornworm, Pepper Maggot - 1-1/3 to 2-2/3 pints. \*(1): If maximum of 1-1/3 pints per acre is applied.

**POTATOES (0):** Aphids, Armyworms, Colorado Potato Beetle, Green Stink Bug, Leaffooted Bug, Potato Flea Beetles, Potato Leafhoppers, Potato Tuberworm, Whitefly - 1-1/3 to 2-2/3 pints per acre. European Corn Borer, Potato Psylla - 1 to 1-1/3 quarts per acre. Threelined Potato Beetle - 1/3 quarts per acre.

**SAFFLOWER:** Green Peach Aphid - 1-1/3 quarts per acre. Do not apply after flower heads open.

**SPINACH (21):** Crown Mite, Green Peach Aphid - 1 quart. Do not exceed 1 application per season.

**STRAWBERRIES (4):** Cyclamen Mite - 2-2/3 quarts per acre in 400 gallons of water. Do not reapply within 35 days if fruit is present. Meadow Spittlebug, Strawberry Aphid, Tarnished Plant Bug - 1-1/3 quarts per acre in 200 gallons of water. Do not reapply within 15 days or more than twice within a 35 day period when fruit is present.

**SUGAR BEETS (30):** Green Peach Aphid - 2/3 to 1-1/3 quarts. Do not feed treated tops to livestock.

**SWEET CORN, Fresh Vegetable Use Only (0):** Corn Leaf Aphid - 1-1/3 quarts. Corn Earworm - 2 quarts. Apply at 2 to 3 day intervals beginning when silks first appear and continuing until they begin to dry. Do not exceed 5 applications per season. Do not apply to sweet corn to be processed. Do not feed treated forage or ensilage to livestock or allow livestock to graze in treated fields.

**SWEET POTATOES (0):** Sweet Potato Flea Beetle - 2/3 quart per acre. Begin applications shortly after transplanting or as soon as flea beetles appear. Work into the soil to a depth of approximately 3 inches making a single treatment just prior to plant set. Do not feed treated potatoes to livestock.

**TOMATOES (Field and Greenhouse) (1):** Blister Beetle, Colorado Potato Beetle, Flea Beetle, Green Peach Aphid - 2/3 quart. Hornworms - 2/3 to 1-1/3 quarts. Tomato Russet Mite, Tomato Fruitworm, Yellowstriped Armyworm - 1-1/3 quarts. Stink Bugs - 1 to 1-1/3 quarts. Cabbage Looper - 1 quart. Whitefly - 2/3 quart per 100 gallons in 100 to 200 gallons of water.

**APPLES (30):** Aphids (Apple, Rosy Apple, Wooly Apple) - 2/3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Apple Rust Mite - 1/3 to 2/3 quart per 100 gallons or 4 to 5-1/3 quarts per acre. Do not feed pomace from treated apples to livestock. Do not exceed 2 applications during the fruiting period.

**CHERRIES (21):** Plum Rust Mite - 2/3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Do



not exceed 2 applications after shuck split.

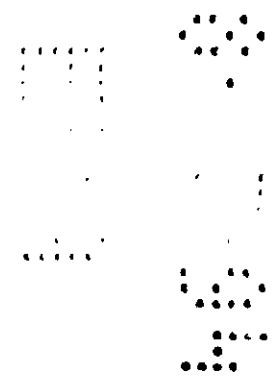
**PEACHES (30), APRICOTS (30), NECTARINES (30):** Aphids (Black Cherry, Black Peach, Green Peach, Rusty Plum), Catfacing Insects, Peach Twig Borer - 2/3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Lesser Peach Tree Borer - 1 quart per 100 gallons. Peach Silver Mite - 1/3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Do not exceed 2 applications during fruiting period. For Lesser Peach Tree Borer, thorough wetting of trunks and main branches is important.

**PLUMS (7), PRUNES (7):** Lesser Peach Tree Borer - 1 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Apply spray to thoroughly wet trunk and main branches. Peach Tree Borer - 1 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Spray thoroughly to cover all bark areas from ground to scaffold limbs.

**GRAPES (7):** Grape Leafhopper - 2/3 quart per 100 gallons or 1-1/3 to 2 quarts per acre. Rose Chafer - 2/3 quart per 100 gallons. Do not apply to Concord variety as severe injury is likely to occur. Ground application preferred.

**PEARS (7):** \*Conspere Stink Bug-Ground Treatment - Use 2/3 quart in 100 gallons. 200 to 400 gallons spray per acre applied to orchard floor and ground around trees prior to bloom. Do not graze livestock in treated orchards. Foliar Treatment - Use 2/3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Stink Bugs must be wet to obtain control. Pear Rust Mite - 2/3 quart per 100 gallons or 2-2/3 to 3-1/3 quarts per acre. Pearleaf Blister Mite - 1/3 to 2/3 quart per 100 gallons applied as a post harvest or dormant treatment. Pear Psylla - 3-1/3 quarts in sufficient water to treat 1 acre. Minimums of 10 gallons per acre for aerial application, 40 gallons per acre for semi-concentrate and 300 gallons per acre for dilute. Apply when adults are first observed or nymphs are small and repeat to maintain control. Make no more than 2 applications during the fruiting period. \*(21) Make no more than 5 applications during the fruiting period.

Note: Aerial application does not result in satisfactory control and should only be employed if impossible to apply by ground.



**CONDITIONS OF SALE - LIMITED WARRANTY  
AND LIMITATIONS OF LIABILITY AND REMEDIES**

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