

**WARNING**

Keep out of reach of children. May be fatal if Swallowed, Inhaled or Absorbed Through Skin. Do not breathe spray mist. Do not get in eyes, on skin or on clothing. In case of contact, immediately remove contaminated clothing and flush skin or eyes with plenty of water. For eyes, get medical attention. Wash thoroughly with soap and water after handling and before eating or smoking, wear clean clothing. During commercial or prolonged exposure in spray mixing and loading operations, wear clean synthetic rubber gloves and a mask or respirator of a type passed by the U.S. Bureau of Mines for End-O-Sulfan protection. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. Workers entering treated areas within 24 hours of application should wear protective clothing.

**NOTE TO PHYSICIANS:** End-O-Sulfan is a central nervous system stimulant. Treat symptomatically. There is no specific antidote.

This product is toxic to fish and wildlife. Keep out of lakes, ponds and streams. Birds feeding in treated areas may be killed. Do not apply when weather conditions favor drift from the areas treated. Do not apply when run-off is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes and containers. Apply only as specified on the label.

This product is toxic to bees and should not be applied when bees are actively visiting the areas.

**DO NOT USE, POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME.** Do not store at temperatures below 20° F.

Do not re-use empty 1 and 5 gallon containers. Destroy them by perforating or crushing. Return 30 and 55 gallon drum to reconditioner or destroy it by perforating or crushing. Bury or discard in a safe place away from water supplies.

Dealer Should Sell In Original Packages Only

**DIRECTIONS FOR USE**

Not For Use Or Storage In Or Around The Home.

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 otherwise 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. Where 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 interval between last application and harvest indicated by number in following the crop.

**ALFALFA (grown for forage) 21:** Meadow Spittlebug 1/2 pint per acre. Apply 1 week after 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. **Seed crop only!** Aphids 1/2 pints, Lygus bugs 2 to 2 1/2 quarts. Do not feed treated forage to dairy or meat animals. Do not use on forage to be sold commercially or shipped interstate.

**BEANS 3, succulent and dry, except Lima Beans:** Black Bean Aphid, Bean Leaf-skeletonizer, Cucumber Beetles, Green Stink Bug, Mexican Bean Beetle 1/2 to 2 1/2 pints, Western Bean Cutworm. Use 1/2 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 1/2 quarts, Armyworms, Cutworms 1/2 quarts per acre.

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

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

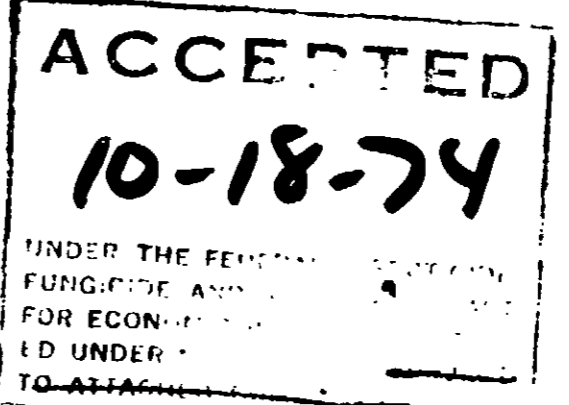
**CUCUMBERS 0, MELONS 0, SUMMER & WINTER SQUASH 0:** Aphids, Cucumber Beetles, Striped Flea Beetle, Melonworm, Pickleworm, Rindworm on watermelons, Squash Beetle, Squash Bug, Squash Vine Borer 1/2 to 2 1/2 pints. For Vine Borer control, apply weekly to flowerbuds, stems and vines beginning when moths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



**END-O-SULFAN**

**3 E.C.**

**Insecticide**



This product contains 3 pounds Endosulfan per gallon.

5905-418

**WARNING: KEEP OUT OF REACH OF CHILDREN  
SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONS**

<b>ACTIVE INGREDIENTS:</b>		<b>BY WT.</b>
Endosulfan (Hexachlorohexahydromethano-2,4,3		33.70%
benzodioxathiepin oxide)		60.50%
Xylene base aromatic petroleum solvent		5.80%
<b>INERT INGREDIENTS</b>		
<b>TOTAL</b>		<b>100.00%</b>

**MUSTARD GREENS 21:** Aphids, Cabbage Looper. Do not exceed 1 application per season.

**PEAS, succulent 0:** Pea Aphid, Pea Weevil 1/2 to 2 during the fruiting period. Use only on peas to be fed to livestock or allow to graze in treated fields.

**PEPPERS 4:** Green Peach Aphid, Flea Beetles. If maximum 1/2 pints per acre is applied.

**POTATOES 0:** Aphids, Armyworms, Colorado Potato Flea Beetles, Potato Leafhopper, Potato Tuber European Corn Borer, Potato Psylla 1 to 1 1/2 quarts per acre.

**SAFFLOWER:** Green Peach Aphid 1/2 quarts per acre.

**SPINACH 21:** Crown Mite, Green Peach Aphid 1/2 quarts per acre.

**STRAWBERRIES 4:** Cyclamen Mite 2 1/2 quarts per acre within 35 days when fruit is present. Meadow Spittlebug 1 1/2 quarts per acre in 200 gallons of water. Do not apply within a 35 day period when fruit is present.

**SUGAR BEETS 30:** Green Peach Aphid 1/2 to 1 1/2 quarts per acre.

**SWEET CORN (Fresh Vegetable Use Only) 0:** Corn Earworm 1/2 to 1 quart. Apply at 2 to 3 day intervals beginning when silks appear. Do not exceed 5 applications per season. Do not feed treated forage or ensilage to livestock.

**SWEET POTATOES 0:** Sweet Potato Flea Beetle 1/2 to 1 quart per acre at transplanting or as soon as Flea Beetles appear. Weevils 1/2 to 1 quart per acre. Make a single treatment just prior to planting.

**TOMATOES (Field and Greenhouse) 1:** Blister Beetle, Peach Aphid 1/2 quart, Hornworms 1/2 to 1 1/2 quarts, Yellowstriped Armyworm 1/2 quarts, Stink Bugs, Whitefly 1/2 quart per 100 gallons in 100 to 200 gallons of water.

**APPLES 30:** Aphids (Apple, Rosy, Apple Woolly), Apple Rust Mite 1/2 to 1 quart per acre. Apply to pomace from treated apples to livestock. Do not feed pomace to livestock.

**CHERRY 21:** Plum Rust Mite 1/2 quart per 100 gallons. Do not exceed 2 applications after shuck split.

**PEACHES 30, APRICOTS 30, NECTARINES 30:** Apple Rust Mite, Catering Insects, Peach Twig Borer, Peach Tree Borer 1 quart per 100 gallons or 2 1/2 to 3 quarts per acre. Do not exceed 2 applications per acre. Thorough wetting of trunks and main scaffold limbs.

**PLUMS 7, PRUNES 7:** Lesser Peach Tree Borer 1/2 quart per 100 gallons or 2 1/2 to 3 quarts per acre. Spray thorough scaffold limbs.

**GRAPES 7:** Grape Leafhopper 1/2 quart per 100 gallons or 2 1/2 to 3 quarts per 100 gallons. Do not apply to Concord. Ground application preferred.

**PEARS 7:** Conspicuous Stink Bug, Ground Treatment. Apply 1/2 quart per acre applied to orchard floor on which graze livestock in treated orchards. Foliar Treatment. Apply 1/2 to 3 quarts per acre. Pearleaf Blister Mite. Post harvest or dormant treatment. Pear Psylla. Minimum of 10 gallons per acre for aerial application and 300 gallons per acre for dilute. Apply when active. Repeat to maintain control. Make no more than 5 applications during the fruiting period. Make no more than 5 applications during the fruiting period. Result in satisfactory control and should only be used if necessary.

**WARRANTY AND LIMITATION OF DAMAGES. H**

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

This product contains 3 pounds Endosulfan per gallon.

ACCEPTED  
10-18-74  
UNDER THE FEDERAL REGISTRATION  
ACT OF 1972 FOR ECONOMIC  
PROMOTION TO ATTACH

5905-418

**WARNING:** KEEP OUT OF REACH OF CHILDREN  
SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONS

ACTIVE INGREDIENTS:	BY WT.
Endosulfan (Hexachlorohexahydromethano-2,4,3 benzodioxathiepin oxide)	33.70%
Xylene base aromatic petroleum solvent	60.50%
<b>INERT INGREDIENTS</b>	5.80%
<b>TOTAL</b>	100.00%

MANUFACTURED BY  
**HELENA CHEMICAL COMPANY**

MEMPHIS TENNESSEE

**POTATOES 0:** Aphids, Armyworm, Colorado Potato Beetle, Flea Beetle, Leafminer, Leafhopper, Colorado Potato Beetle, Flea Beetle, European Corn Borer, Potato Blight, Potato Virus, Spindle Tip, Tobacco Root Disease, Tobacco Stalk Weevil. 1 quart per acre.

**SAFFLOWER:** Green Peach Aphid, Leafminer, Tobacco Root Disease, Tobacco Stalk Weevil. 1 quart per acre.

**SPINACH 21:** Flea Beetle, Leafminer, Tobacco Root Disease, Tobacco Stalk Weevil. 1 quart per acre.

**STRAWBERRIES 4:** Flea Beetle, Leafminer, Tobacco Root Disease, Tobacco Stalk Weevil. 1 quart per acre. Apply within 35 days when fruit is present. Do not apply to wet foliage. Do not exceed 2 applications per season. Do not feed treated forage or ensilage to livestock. Do not allow to graze in treated field.

**SUGAR BEETS 30:** Green Peach Aphid, Leafminer, Tobacco Root Disease, Tobacco Stalk Weevil. 1 quart per acre.

**SWEET CORN (Fresh Vegetable Use Only) 0:** Corn Leaf Aphid, Flea Beetle, Leafminer, Tobacco Root Disease, Tobacco Stalk Weevil. 1 quart per acre. Apply at 2 to 3 day intervals beginning when the first appearance of insects occurs. Do not apply to wet foliage. Do not exceed 5 applications per season. Do not apply to wet foliage. Do not feed treated forage or ensilage to livestock. Do not allow to graze in treated field.

**SWEET POTATOES 0:** Sweet Potato Flea Beetle. 1 quart per acre. Begin application immediately after transplanting or as soon as Flea Beetles appear. Work into the soil to a depth of approximately 2 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, 1 quart; Hornworms, 1 to 1 1/2 quarts; Tomato Russet Mite, Tomato Fruitworm, Yellowstriped Armyworm, 1 to 1 1/2 quarts; Stink Bugs, 1 to 1 1/2 quarts; Cabbage Looper, 1 quart; Whitefly, 1/2 quart per 100 gallons in 100 to 200 gallons of water.

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

**CHERRY (21):** Plum Rust Mite, 1/2 quart per 100 gallons or 2 1/2 to 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), Catering Insects, Peach Twig Borer, 1/2 quart per 100 gallons or 2 1/2 to 3 quarts per acre; Lesser Peach Tree Borer, 1 quart per 100 gallons; Peach Silver Mite, 1/2 quart per 100 gallons or 2 1/2 to 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 1/2 to 3 quarts per acre. Apply spray to thoroughly wet trunks and main branches. Peach Tree Borer, 1 quart per 100 gallons or 2 1/2 to 3 quarts per acre. Spray thoroughly to cover all bark areas from ground to scaffold limbs.

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

**PEARS (7):** Conspicuous Stink Bug - Ground Treatment, use 1/2 quart per 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 1/2 quart per 100 gallons or 2 1/2 to 3 quarts per acre. Stink Bugs must be wet to obtain control. Pear Rust Mite, 1/2 quart per 100 gallons or 2 1/2 to 3 quarts per acre. Pearleaf Blister Mite, 1/2 to 1 quart per 100 gallons applied as a post harvest or dormant treatment. Pear Psylla, 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. NOTE: Aerial application does not result in satisfactory control and should only be employed if impossible to apply by ground.

**WARRANTY AND LIMITATION OF DAMAGES:** Helena Chemical Company warrants that this material conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the Directions for Use and Conditions of Sale, subject to the inherent risks referred to therein. Helena Chemical Company makes no other express or implied warranty, including any other express or implied warranty of FITNESS or MERCHANTABILITY, and no agent of Helena Chemical Company is authorized to do so except in writing with a specific reference to this warranty. Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or value, etc.

U.S. Patent No. 2,799,685.  
NET CONTENTS: EPA Reg. No. 5905-418