This label has been updated according to the reevaluation/special review decision of Acephate RVD2020-07/SRD2020-07. While users are encouraged to follow this updated label immediately, the previously approved label is valid until 03/04/22 in accordance with the phase out period set out in RVD2020-07/SRD2020-07. This previously approved label will be provided upon request by emailing hc.pmra.info-arla.sc@canada.ca. In your email please include the product name and Registration number of the label you are requesting.

### COMMERCIAL

### ACECAP® 97 SYSTEMIC INSECTICIDE IMPLANTS

### FOR CONTROL OF CERTAIN DESTRUCTIVE PESTS OF ORNAMENTAL AND FOREST TREES

### SYSTEMIC INSECT CONTROL FOR TREES

**Active Ingredient:** Acephate (O,S-dimethyl acetylphosphoramidothioate)... 0.773g/implant cartridge

DANGER POISON



# READ THE LABEL AND THIS BROCHURE BEFORE USING KEEP OUT OF REACH OF CHILDREN SEE ADDITIONAL PRECAUTIONARY STATEMENTS

**REGISTRATION NO. 21568** 

PEST CONTROL PRODUCTS ACT

UPL AgroSolutions Canada Inc. PO Box 12219 Research Triangle Park, NC 27709

For product information call: 1-800-438-6071

FOR CHEMICAL EMERGENCY: spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300

DISTRIBUTOR:
Nutrite Division of (de)
Fertichem, Inc.
560 Rheaume, St-Michel, Quebec CANADA JOL 2JO
23 Union St., Elmira, Ontario CANADA N3B 2Z6

MANUFACTURED IN THE U.S.A. BY: Creative Sales, Inc. Fremont, Nebraska

### **DIRECTIONS FOR USE**

**DO NOT** apply this product directly to freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands), estuaries or marine habitats."

- 1. To begin with, select the proper tools. You will need:
  - Electric drill (use a sharp spiral bit) as shown. Refer to back of package for the appropriate bit diameter
  - Hammer
  - Flat end punch, bolt or dowel
  - Tree wound dressing
- 2. If using a hand brace, a sharp auger bit will provide the cleanest cut. Refer to back of package for the appropriate bit diameter.
- 3. To determine the number of implants required, measure the tree trunk diameter at breast height (DBH) in cm, multiply the DBH by 3.14, and divide the result (circumference) by 10.16. **Example:** 33 cm DBH x 3.14 = 103.6 cm circumference ÷ 10.16 = 10 implants required. When the base of the tree is wider than the DBH (as illustrated), distribute the implants evenly around the base. This may vary slightly from the recommended spacing.
- 4. Drill 0.95 cm diameter implant holes at approximately 10.16 cm spacing, spiraling up and around the base of the tree trunk. Holes should be drilled 3.2 cm deep (into the sap wood; i.e., beyond the cambium layer) to ensure that the cartridge head can be implanted beneath the bark and cambium surface. Cartridges left extending through the bark layer will delay or inhibit wound closure.
- 5. Note: Where lower branching occurs 1.5 meters from the ground, make certain the implants are placed directly beneath the lower branches. This will assure adequate distribution of chemical throughout the tree.
- 6. Next, drill the implant holes at a uniform spacing, spiraling up and around the lower tree trunk surface. Start approximately 6 inches (15.2 cm) from the soil level. Be sure to removedrill shavings from each hole. See below for the hole depth.
- 7. Using a measuring instrument (i.e. flat end of pen or pencil) as a depth gauge, insert completely into each hole and mark the depth by placing your thumb against the outer bark. Based on implant diameter and thickness of bark, holes should be drilled as described below:

8. **Notice:** Hole Depth is from inside the inner bark into the cambium.

IMPLANT DIAMETER HOLE DEPTH .95 cm (3/8") 3.2 cm (1½") 6.5 cm (½") 2.23 cm (7/8")

- 9. Place the implant cartridges into the pre-drilled holes, simply pressing them into the tree trunk. Be sure to press the cartridges in as far as possible.
- 10. Using a hammer and a flat end punch, dowel, or bolt, carefully drive the cartridge into the tree, recessing the large end slightly beneath the cambium surface, which is below the bark.
- 11. The application process is now completed; natural sap flow will "systemically" absorb the chemical and distribute it throughout the tree. The active layer of bark will soon grow over and close the implant site. The cartridges are designed to be left inside the tree.
- 12. The cartridge head securely plugs the small wound made to the tree trunk, however, it is recommended that a light wound dressing be sprayed or brushed over the implant site. This provides further protection until the cambium closes over.
- 13. When retreatment is necessary, place the new implants in a spiral pattern between, and above or below the previous treatment. **Do not attempt to drill into and remove the cartridges implanted previously.** Note the positioning of three applications.
- 14. When using ACECAP 97 SYSTEM INSECTICIDE IMPLANTS, the implant treatment may be combined over several seasons with a conventional spray or soil treatment insect control program. DO NOT REPEAT IMPLANT TREATMENTS WHERE TREE HAS NOT SHOWN THE ABILITY TO ADEQUATELY CLOSE OVER THE PRIOR TREATMENT.

### **ADDITIONAL PRECAUTIONS**

- Use proper drill bit.
- Remove shavings from hole.
- Recess cartridge end below the inner bark.
- Carefully read the application timing for optimum results.
- Always read and follow label directions for product being used.
- Avoid contact with any unsealed or broken implant cartridges.
- Wear long-sleeved shirt, long pants and chemical-resistant gloves when handling and inserting implants into holes in the tree.
- DO NOT enlarge the hole diameter.
- DO NOT use a sharp end punch.
- **DO NOT** implant into trees where fruit, nuts or syrup is to be used for sale or consumption.
- **DO NOT** implant into trees having less than 7.5 cm trunk diameter.
- **DO NOT** use implants on trees other than those listed on this label.
- DO NOT use implants on trees entering dormancy.
- **DO NOT** repeat implant treatments where tree has not shown the ability to adequately close over the prior treatment.
- DO NOT remove previously implanted cartridges.
- DO NOT break plastic gelatin.
- DO NOT place implant too deep.

#### IN AREAS OF PUBLIC ACCESS

Ensure that implant holes are covered with a suitable tree wound dressing prior to leaving treated trees

### **APPLICATION TIMING**

TOXIC to bees, birds and mammals. This product is systemic and is transported upwards through the tree. Bees, birds and mammals can be exposed to residues in floral pollen and/or nectar, fruits, seeds or sap resulting from tree injections. EXCEPT FOR CONIFEROUS TREES, APPLICATION MUST BE MADE POST-BLOOM. Applying post-bloom reduces risk to pollinators.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes

Applications timed with maximum upward flow of tree sap produce the most successful results. This characteristic may vary with tree species, geographic area, time of day, individual tree vigour or light intensity at time of treatment. If soil moisture conditions are dry, a thorough deep root watering prior to or immediately following implant treatment will enhance chemical uptake. It takes 4–7 days for the insecticide to attain effective levels in the foliage of the tree (as early as 2 days if trees are in a healthy vegetative growth conditions). Maximum duration of control documented is 18 weeks. Optimum control of severe infestations is 10-12 weeks. When retreatment is necessary, place the new implants in a spiral pattern between and above or below the previous treatment.

The effect of systemic implants is maximized when implants are in place in the tree during the period of optimum xylem activity, to transfer the chemical from the implants into the crown of the tree. The chemicals used possess little (if any) phloem activity, therefore, it is suggested application be avoided as trees are going into dormancy. Therefore, ACECAP 97 SYSTEMIC INSECTICIDE IMPLANTS should be made just prior to expected insect activity, or at earliest indication of insect activity. Application is not recommended during tree dormancy (as with nutrient implants) when attempting to control targeted insect pests on the foliage.

# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN DANGER

Material within gelatin capsule may cause eye or skin irritation. Fatal or Poisonous if swallowed.. Do not get in eyes, on skin or on clothing. Avoid breathing vapors. Avoid contact with any unsealed or broken implant cartridges.

### PROTECTIVE CLOTHING AND EQUIPMENT

Applicators must wear a long-sleeved shirt, long pants and chemical-resistant gloves.

#### FIRST AID

**IF SWALLOWED**, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person. **IF ON SKIN OR CLOTHING**, take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre 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 by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

**IF IN EYES**, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

### **TOXICOLOGICAL INFORMATION**

Acephate is an organophosphate that is a cholinesterase inhibitor. Typical symptoms of overexposure to cholinesterase inhibitors include headache, nausea, dizziness, sweating, salivation, runny nose and eyes. This may progress to muscle twitching, weakness, tremors, incoordination, vomiting, abdominal cramps and diarrhea in more serious poisonings. A lifethreatening poisoning is signified by loss of consciousness, incontinence, convulsions, and respiratory depression with a secondary cardiovascular component. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as pralidoxime chloride, may be therapeutic if used early; however, use only in conjunction with atropine. In cases of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration. With oral exposure, the decision of whether to induce vomiting or not should be made by an attending physician.

### **ENVIRONMENTAL PRECAUTIONS**

Keep out of lakes, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of wastes. **TOXIC** to bees exposed to direct treatment, drift or residues on flowering crops or weeds. **DO NOT** apply this product to flowering crops or weeds if bees are visiting the treatment area. Minimize the spray drift to reduce harmful effects on bees in habitats close to the application site.

Toxic to aquatic organisms, birds and small wild mammals. Toxic to bees, follow instructions in the DIRECTION FOR USE section.

The use of this product may result in contamination of groundwater particularly in areas where soils are permeable (e.g., sandy soil) and/or the depth to the water table is shallow.

PRODUCT NO. AC4X25

CONTAINS: 100 Implant Cartridges [773 mg \* 100] Net Contents 77.3 grams (Carton label)

COMMERCIAL

### ACECAP® 97 SYSTEMIC INSECTICIDE IMPLANTS

FOR CONTROL OF CERTAIN DESTRUCTIVE PESTS OF ORNAMENTAL AND FOREST TREES

EASY-TO-USE ENCAPSULATED IMPLANTS NO MIXING, MEASURING, OR SPRAYING REQUIRED

DO NOT OPEN POUCH UNTIL READY FOR USE.
RESEAL AND PROPERLY STORE AWAY FROM FOOD SUPPLIES IF NOT TOTALLY
USED.

ACECAP Reg. T.M. — Creative Sales, Inc. Insecticide Implants containing ORTHENE<sup>®</sup>. ORTHENE Reg. T.M. for Acephate Insecticide. Canada Patent Nos.: 970, 157; 1,144,068; 1,170,056

**Active Ingredient:** 

Acephate (O, S-Dimethyl Acetylphosphoramidothioate) ...0.773g/cartridge

DANGER POISON

Form No. 16-90-CN-4

**Production Lot No.** 

READ THE LABEL AND ENCLOSED BROCHURE BEFORE USING

KEEP OUT OF REACH OF CHILDREN
SEE ADDITIONAL PRECAUTIONARY STATEMENTS

**REGISTRATION NO. 21568** 

PEST CONTROL PRODUCTS ACT.

Printed in U.S.A.

UPL AgroSolutions Canada Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

For product information call: 1-800-438-6071

FOR CHEMICAL EMERGENCY: spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300

DISTRIBUTOR:
Nutrite Division of (de)
Fertichem, Inc.
560 Rheaume, St-Michel, Quebec CANADA JOL 2JO
23 Union St., Elmira, Ontario CANADA N3B 2Z6

MANUFACTURED IN THE U.S.A. BY: Creative Sales, Inc. Fremont, Nebraska

SITE	PEST	RATE (a.i.)	APPLICATION INSTRUCTIONS AND LIMITATIONS
ASH	Emerald Ash Borer	773 mg/cartridge 1 cartridge per 10.16 cm	Preventative treatment should be made by applying implants early April – early June.
			Treatment reduces populations of emerald ash borer larvae and the damage they cause, but may not provide control of this pest. APPLICATION MUST BE MADE POST-BLOOM
BASSWOOD	Elm Spanworm	773 mg/cartridge 1 cartridge per 10.16 cm	Apply in early spring prior to larvae feeding. APPLICATION MUST BE MADE POST-BLOOM
BEECH	Elm Spanworm	773 mg/cartridge 1 cartridge per 10.16 cm	Apply in early spring prior to larvae feeding. APPLICATION MUST BE MADE POST-BLOOM
BIRCH	Aphids (Green)	773 mg/cartridge 1 cartridge per 10.16 cm	Apply when wingless forms are first noticed.
	Birch Leafminer		Apply when insects first appear.
CHESTNUT	Elm Spanworm	773 mg/cartridge 1 cartridge per 10.16 cm	Apply in early spring prior to larvae feeding. APPLICATION MUST BE MADE POST-BLOOM
ELM	Aphids (Woolly)	773 mg/cartridge 1 cartridge per 10.16 cm	Apply only when heavy production of white waxy material becomes evident.
	Elm Leaf Beetle Larvae		Apply as eggs are hatching or when larvae are first noticed.
	Elm Spanworm		Apply in early spring prior to larvae feeding.
FIR	Spruce Coneworm	773 mg/cartridge 1 cartridge per 10.16 cm	Apply immediately prior to or at budswell.
	Western Spruce Budworm		
FLOWERING CHERRY	Eastern Tent Caterpillar	773 mg/cartridge 1 cartridge per 10.16 cm	Apply when insects first appear. APPLICATION MUST BE MADE POST-BLOOM

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HICKORY	Elm Spanworm	773 mg/cartridge 1 cartridge per 10.16 cm	Apply in early spring prior to larvae feeding. APPLICATION MUST BE
			MADE POST-BLOOM

LINDEN	Elm Spanworm	773 mg/cartridge 1 cartridge per 10.16 cm	Apply in early spring prior to larvae feeding. APPLICATION MUST BE MADE POST-BLOOM
MAPLE	Maple Bladdergall Mite	773 mg/cartridge 1 cartridge per 10.16 cm	Apply only if very high populations of galls develop on foliage.
	Gypsy Moth Larvae		Apply as eggs are hatching or when insects first appear.
	Elm Spanworm		Apply in early spring prior to larvae feeding.
OAK	Aphids (Woolly)	773 mg/cartridge 1 cartridge per 10.16 cm	Apply only when heavy production of white waxy material becomes evident.
	Gypsy Moth Larvae		Apply as eggs are hatching or when insects first appear. APPLICATION MUST BE MADE POST-BLOOM
	Oak Leafshredder		Apply when insects first appear. APPLICATION MUST BE MADE POST-BLOOM
	Elm Spanworm		Apply in early spring prior to larvae feeding. APPLICATION MUST BE MADE POST-BLOOM
PINE	Aphids (Woolly)	773 mg/cartridge 1 cartridge per 10.16 cm	Apply when wingless forms are first noticed.
	Pine Needleminer		Apply immediately prior to or at budswell.
	Cone Maggots		
SPRUCE	Aphids (Green & Woolly)	773 mg/cartridge 1 cartridge per 10.16 cm	Apply when wingless forms are first noticed.
	Spruce Coneworm		Apply immediately prior to or at budswell.
	Western Spruce Budworm		
WALNUT	Elm Spanworm	773 mg/cartridge 1 cartridge per 10.16 cm	Apply in early spring prior to larvae feeding. APPLICATION MUST BE MADE POST-BLOOM

### NOTE:

- **DO NOT** implant into trees where fruit, nuts or syrup is to be used for sale or consumption.
- DO NOT implant into trees having less than 7.5 cm trunk diameter.
- **DO NOT** use implants on trees other than those listed on this label.

For best results, use tools and techniques as recommended in the DIRECTIONS FOR USE section of the label.

To determine the number of implants required, measure the tree trunk diameter at breast height (DBH) in cm, multiply the DBH by 3.14, and divide the result (circumference) by 10.16.

**Example:** 33 cm DBH x 3.14 = 103.6 cm circumference ÷ 10.16 = 10 implants required. Drill 0.95 cm diameter implant holes at approximately 10.16 cm spacing, spiraling up and around the base of the tree trunk. Holes should be drilled 3.2 cm deep (into the sap wood; i.e., beyond the cambium layer) to ensure that the cartridge head can be implanted beneath the bark and cambium surface. Cartridges left extending through the bark layer will delay or inhibit wound closure.

**IN AREAS OF PUBLIC ACCESS**, ensure that implant holes are covered with a suitable tree wound dressing prior to leaving treated trees.

This product may be used in residential areas. Entry to treated areas by bystanders is restricted until all insecticide is injected into the trees.

### **APPLICATON TIMING**

Applications timed with maximum upward flow of tree sap produce the most successful results. This characteristic may vary with tree species, geographic area, time of day, individual tree vigour or light intensity at time of treatment. If soil moisture conditions are dry, a thorough deep root watering prior to or immediately following implant treatment will enhance chemical uptake. It takes 4–7 days for the insecticide to attain effective levels in the foliage of the tree (as early as 2 days if trees are in a healthy vegetative growth conditions). Maximum duration of control documented is 18 weeks. Optimum control of severe infestations is 10-12 weeks. When retreatment is necessary, place the new implants in a spiral pattern between and above or below the previous treatment.

#### RETREATMENT

ACECAP 97 SYSTEMIC INSECTICIDE IMPLANTS may be utilized in an integrated pest management program. DO NOT REPEAT IMPLANT TREATMENTS WHERE A TREE HAS NOT SHOWN THE ABILITY TO ADEQUATELY CALLOUS (OR CLOSE OVER) THE PRIOR TREATMENT.

# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN DANGER

Material within gelatin capsule may cause eye or skin irritation. Fatal or Poisonous if swallowed. Do not get in eyes, on skin or on clothing. Avoid breathing vapors. Avoid contact with any unsealed or broken implant cartridges.

### PROTECTIVE CLOTHING AND EQUIPMENT

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### **FIRST AID**

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### **TOXICOLOGICAL INFORMATION**

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### **ENVIRONMENTAL HAZARDS**

Keep out of lakes, ponds or streams. Do not contaminate water by cleaning of equipment or disposal of wastes. **TOXIC** to bees exposed to direct treatment, drift or residues on flowering

crops or weeds. **DO NOT** apply this product to flowering crops or weeds if bees are visiting the treatment area. Minimize the spray drift to reduce harmful effects on bees in habitats close to the application site.

**TOXIC** to birds and wild mammals. Applications may adversely affect birds and wildlife visiting the treatment area.

The use of this product may result in contamination of groundwater particularly in areas where soils are permeable (e.g., sandy soil) and/or the depth to the water table is shallow.

**TOXIC** to aquatic organisms.

### STORAGE

Store in a cool dry place. Protect from excessive heat. Keep foil packages sealed until ready for use.. Store this product away from food or feed.

### **DISPOSAL**

Do not re-use the plastic implant cartridges; they are designed to be implanted and left in the tree. Do not re-use empty container or container wrappings

Dispose of the container in accordance with provincial requirements.

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

### RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, please note that ACECAP 97 contains a Group 1B insecticide. Any insect population may contain individuals naturally resistant to ACECAP 97 and other Group 1B insecticides. The resistant individuals may dominate the insect population if this group of insecticides is used repeatedly in the same fields. Other resistance mechanisms that are not linked to site of action but are specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay insecticide resistance:

- Where possible, rotate the use of ACECAP 97 or other Group 1B insecticides with different groups that control the same pests.
- Use tank mixtures with insecticides from a different group when such use is permitted.
- Insecticide use should be based on an IPM program that includes scouting and record keeping, and considers cultural, biological and other chemical control practices.
- Monitor treated pest population for resistance development.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact UPL AgroSolutions Canada Inc at 1-800-438-6071.

### **NOTICE TO USER**

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *PEST CONTROL PRODUCTS ACT* to use this product in a way that is inconsistent with the directions on the label.

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