

### Systemic Tree & Ornamental Insecticide

# KEEP OUT OF REACH OF CHILDREN CAUTION

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 Side/Back Panel for Additional Precautionary Statements, First Aid and Directions for Use

Lepitect<sup>TM</sup> Systemic Tree & Ornamental Insecticide is absorbed through the plant root system and then moves throughout the plant, protecting it from the damage caused by sucking insects and certain chewing insects as listed.

Active Ingredient	
Acephate (O,S-Dimethyl acetylphosphoramidothioate)	97.4%
Active Ingredient Acephate (O,S-Dimethyl acetylphosphoramidothioate) Other Ingredients	2.6%
Total	100%

EPA Reg. No. 74779-6

EPA Est. No. 39578-TX-1

#### Distributed by:



#### **Rainbow Treecare Scientific Advancements**

11571 K-Tel Dr Minnetonka, MN 55343

1-877-272-6747 www.treecarescience.com

FIRST AID: Acephate is an organophosphate, cholinesterase inhibitor				
IF SWALLOWED	<ul> <li>Call poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>			
IF IN EYES	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call poison control center or doctor immediately for treatment advice.</li> </ul>			
IF ON SKIN OR CLOTHING	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call poison control center or doctor immediately for treatment advice.</li> </ul>			
IF INHALED	<ul> <li>Move person to fresh air</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call poison control center or doctor immediately for treatment advice.</li> </ul>			

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

#### **HOT LINE NUMBER**

For 24 hour medical emergency assistance (human or animal), or chemical emergency assistance (spill, leak or accident).

Call CHEMTREC at 1-800-424-9300.

#### **NOTES TO PHYSICIAN**

This material contains a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure but decisions regarding treatment will usually need to be made before test results are available. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone.

# PRECAUTIONARY STATEMENT HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if swallowed.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are those made of any waterproof material. If you want more options, follow the instruction for category A on an EPA chemical-resistant category selection sheet.

Mixers, loaders, applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves
- Shoes plus socks

In addition, all mixers and loaders and all applicators using low pressure hand wand application equipment must wear:

 A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any N, R, P, or HE filter

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this products concentrate. Do not reuse 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.

#### **USER SAFETY RECOMMENDATIONS:**

Users should:

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

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to birds. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of wastes. Cover or soil-incorporate spills.

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.

#### **DIRECTIONS FOR USE**

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

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

#### **RESTRICTIONS**

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. Do not apply this product through any type of irrigation system.

Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.

Do not apply using low pressure hand wand except when used on ornamental trees, shrubs, and floral plants grown for non-agricultural or non-commercial use.

Not for indoor residential use. For greenhouse use, use is limited to commercial greenhouses for use on ornamental, floral and foliage plants.

Do not apply by air.

#### **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 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  $24\ \text{hours}.$ 

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, waterproof gloves, shoes plus socks

#### **NON-AGRICULTURAL USE REQUIREMENTS**

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

Do not enter or allow others to enter treated areas until sprays have dried.

#### **TANK MIXES**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor.

Read and follow the entire label of each product to be used in the tank mix with this product.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions, (e.g., wind direction, wind speed, temperature, relative humidity) and method of application can influence pesticide drift. The applicator and grower must evaluate all factors and make appropriate adjustments when applying this product.

- All application equipment must be properly maintained and calibrated using water as carrier. Do not apply this product as an ultralow (ULV) spray, or in any carrier other than water.
- Use the largest droplet size consistent with good pest control. Small
  droplets are more prone to spray drift and can be minimized by
  appropriate nozzle selection, by orienting nozzles away from the air
  stream as much as possible, and by avoiding excessive spray boom
  pressure.
- Do not apply at wind speeds greater than 10 mph at the application site.
- Apply as close to target plans as practical to obtain a good spray pattern for adequate coverage.
- For airblast applications, direct spray above foliage and turn off outward pointing nozzles at row ends and outer rows.
- Do not apply at heights greater than 4 feet.

#### **MIXING INSTRUCTIONS**

Thoroughly clean all application components prior to mixing. Add approximately ½ of the required amount of water to the application tank and begin agitation. Add the required amount of Lepitect™ Systemic Tree & Ornamental Insecticide and mix thoroughly. Then add other additives and the remaining water. Maintain agitation during filling and application to ensure uniform mixture.

For application equipment that has minimal agitation, give proper attention to mixing this product. With such equipment, premix this product with water to form a slurry prior to putting the product into the applicator. If premixing is not done, then allow adequate time for the product to dissolve in the water prior to beginning applications.

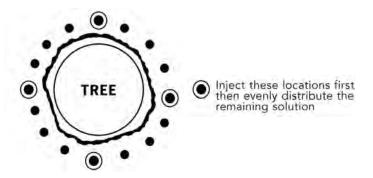
SMALL VOLUME DILUTION CHART				
Amount of product per 100 gallons of water	Amount of product per 25 gallons of water	Amount of product per 1 gallon of water		
1/4 lb (113.4 g) 1/2 lb (226.8 g) 3/4 lb (340.2 g) 1 lb (453.6 g)		1/3 tsp (1.1 g) 2/3 tsp (2.3 g) 1 tsp (3.4 g) 1 1/3 tsp (4.5 g)		

#### **APPLICATION METHOD**

Pull back landscape mulch, landscape fabric and surface organic matter prior to making soil applications to ensure solution is delivered to the mineral soil.

Measure the diameter of the tree at breast height (DBH), 4'6" above the soil line. For multi-stemmed trees and shrubs, use the cumulative diameter of individual stems at soil line instead of DBH.

**Basal Soil Injection:** Mix required dosage in sufficient water to inject an equal amount of solution in each hole. For trees less than 8 inches DBH, use a minimum of 4 injection sites per tree. Space injection sites evenly around the base of the tree no more than 12 inches out from the base. Maintain a low pressure and inject into the mineral soil to a depth of two (2) to six (6) inches. Dilution rate may vary depending on equipment used and tree size. Refer to the injector equipment instructions for guidance.



#### **ORNAMENTAL TREE AND SHRUBS - SOIL APPLICATION**

PLANTS	INSECTS	AMOUNT OF PRODUCT	APPLICATION TIMING	APPLICATION DIRECTIONS	RESTRICTIONS
Ornamental Trees and Shrubs	Aphids Bagworm Black Vine Weevil Budworm Cankerworm Cuban Laurel Thrips Gall Forming Insects Gypsy Moth (larvae) Japanese Beetle Lacebugs Leaf Beetles Leafnoppers Leafminers Leafrollers Leaftier (larvae) Lepidoteran (larvae) Loopers Maple Shoot Moth Oakworm Pine Coneworm Pine Tip Moth (larvae) Plantbugs Sawflies Scales Spider Mites Tent Caterpillar Tiger moth (larvae) Webworm Whitefly Winter moth (larvae)	For trees up to 15 inches in trunk diameter (DBH) use 1/5 oz (5.7 g) per DBH inch One 10 oz packet will treat 50 inches of trunk diameter (DBH)  For trees 15 DBH inches or greater use 1/5 oz (5.7 g) to 2/5 oz (11.3 g) per DBH inch.One 10 oz packet will treat 25 to 50 inches of trunk diameter (D.B.H)  Dilute 1 packet (10 oz) in up to 25 gallons of water.	Make applications to actively growing plants just prior to or when insects first appear	For optimal uptake, irrigate the treated area after treatment to promote absorption into the root system. Applications to dry soil may decrease performance. Rainbow Treecare Scientific Advancements does not recommend applications be made to Huckleberry, Balm of Gilead, Cottonwood, Lombardy Poplar, and Viburnum suspensum.  Caution: Phytotoxicity has occurred on the following crabapple varieties: Hopa, Ichonoski, Malusfloribunda, Pink Perfection, Red Wine, and Snow Cloud.	Do not apply more than once per month.  Do not apply to areas where food crops are grown (i.e., vegetable gardens, fruit trees, berry vines, etc.), children's play areas, or animal runs.  Do not apply more than 5 lbs. of product per acre per application.  Do not apply more than 6 lbs of product per acre per year.

### ORNAMENTAL TREES AND SHRUBS – FOLIAR SPRAY – Maximum single application rate is 1.0 lb active ingredient per acre.

PLANTS	INSECTS	AMOUNT OF PRODUCT PER 100 GALLONS	APPLICATION TIMING	APPLICATION DIRECTIONS	RESTRICTIONS
Ornamental Trees and Shrubs (Except Flowering Crabapple)	Aphids Bagworms Birch Leafminer Lace Bugs Leafrollers Tent Caterpillars  Douglas Fir Tussock Moth Larvae Gypsy Moth Larvae* Webworms	1/4 lb (4 oz) (113.4 g) 1/2 lb (8 oz)	Begin treatments when insects first appear. Repeat applications every 2 weeks as needed.	Apply as a full coverage spray using a hydraulic sprayer. Rainbow Treecare does not recommend applications be made to Huckleberry, Balm of Gilead, Cottonwood, Lombardy Poplar, and Viburnum suspensum.  For nursery crops, spray only a few plants and observe for 2	
	Scale (Crawlers)	½ lb (8oz) (226.8g)	Begin treatments when crawlers first appear. Repeat applications every 2 weeks as needed to achieve control.	weeks and evaluate for phytotoxicity before treating the entire crop.  The use of a sticker improves control of gypsy moth larvae.  *Mist blower application: Adjust rates to 1 lb per 100 gallons of water for Gypsy Moth control.  Adjust rate to 3/4lb per 100 gallons of water for tent caterpillar control.	
	Ponderosa Pine Needle Miner	½ lb (8oz) (226.8g)	Time of application is important. Consult your County Extension Agent for proper timing. Repeat applications every 2 weeks as needed.	Apply as a full coverage spray using a hydraulic sprayer.	
	California Oakworm Cankerworms (Spring and Fall)	1/4 lb to 1/2 lb (4 to 8 oz) (113.4 to 226.8g)	Begin treatments when insects first appear. Use the higher rate when larger larvae are present. Repeat applications every 2 weeks as needed.	Apply as a full coverage spray using a hydraulic sprayer.	
	Nantucket Pine Tip Moth Larvae	34 lb (12 oz) (340.2 g)	Time of application is important. Consult your County Extension Agent for proper timing. Repeat applications will be necessary for subsequent generations. Repeat applications every 2 weeks as needed.	Apply as a full coverage spray using a hydraulic sprayer.	

### ORNAMENTAL TREES AND SHRUBS - FOLIAR SPRAY - Maximum single application rate is 1.0 lb active ingredient per acre. (continued)

PLANTS	INSECTS	AMOUNT OF PRODUCT PER 100 GALLONS	APPLICATION TIMING	APPLICATION DIRECTIONS	RESTRICTIONS
Ornamental Trees and Shrubs (Except Flowering Crabapple)	Root Weevil Adults	34 lb (12 oz) (340.2 g)	Begin treatments when feeding damage first appears. Repeat applications every four weeks until the first heavy frost may be necessary for complete foliage protection.	Apply as a full coverage spray using a hydraulic sprayer.	
	Box Elder Bugs Budworms Leafhoppers Sawflies	34 lb (12 oz) (340.2 g)	Begin treatments when insects first appear. Repeat applications every 2 weeks as needed.	Apply as a full coverage spray using a hydraulic sprayer.	
	Japanese Beetles Elm Leaf Beetles	1 lb (16 oz) (453.6 g)	Begin treatments when insects first appear. Repeat applications every 2 weeks as needed.		
Douglas Fir (Christmas Trees)	Douglas Fir Needle Midge	½ lb (8 oz) (226.8 g)	Application should be made no more than 2 weeks prior to bud burst. For additional pest management information, consult your County Extension Agent The minimum spray intervals for repeat applications is 3 days for rates up to and including 0.5 lb ai/acre and 7 days for rates exceeding 0.5 lb.ai/acre.	Apply by ground as a full coverage spray in 100 gallons of water using a hydraulic sprayer.	
Flowering Crabapples	Aphids Leafrollers Tent Caterpillars	½ lb (4 oz) (113.4 g)	Begin treatments as the insects begin to appear. Repeat applications every 4 weeks as needed.	Apply as a full coverage spray using a hydraulic sprayer. <b>Caution:</b> Phytotoxicity has occurred on the following crabapple varieties: Hopa, Ichonoski, Malus floribunda, Pink Perfection, Red Wine, and Snow Cloud	Do not apply more often than 3 times in a growing season at a four (4) week interval  Do not apply by low pressure hand wand.
Crape Myrtle	Aphids	2 – 3 level tablespoons (0.6 to 0.9 oz) (17 to 25.5 g) per 1 tablespoon of water	Begin treatments as aphids begin to appear. The minimum spray intervals for repeat applications is 3 days for rates up to and including 0.5 lb ai/acre and 7 days for rates exceeding 0.5 lb.ai/acre	Make a paint-on slurry by mixing. Remove the loose bark from the trunk areas to be treated. Completely paint a band around each trunk to a width twice its diameter.  Make applications to trunks 6 to 8 inches above the ground and below the point where branching begins. For multi-trunk plants, make treatments as low as possible within the 6 to 12 inches of the ground.	

#### STORAGE AND DISPOSAL

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

#### **PESTICIDE STORAGE**

Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in a cool, dry place. Protect from excessive heat. Do not contaminate food or foodstuffs. Do not store or transport near feed or food. For help with any spill, leak, fire or exposure involving this material, call CHEMTREC at 1-800-424-9300

#### PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited.

#### **CONTAINER DISPOSAL**

Non-refillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling, if available or dispose of empty bag in a sanitary landfill or by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Note: This product is sold by weight. Settling may have occurred during shipment.

# CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**Notice:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Tree injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or tree conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS or seller.

To the extent consistent with applicable law, all such risks shall be assumed by Buyer and User, and Buyer and User agree to hold RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS and seller harmless for any claims relating to such factors.

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions. This warranty does not extend to the use of the product contrary to label instructions,, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, RAINBOW TREECARE MAKES NO WARRANTIES OR MERCHANABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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