



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

October 25, 2017

Mr. Solito A. Sumulong  
Manager of Registrations  
Loveland Products, Inc.  
P.O. Box 1286  
Greeley, CO 80632

Subject: Label Amendment – Updating mixing and loading language for water soluble packaging.  
Product Name: Acephate 90SP Insecticide  
EPA Registration Number: 34704-880  
Application Date: May 2, 2017  
Decision Number: 529732

Dear Mr. Sumulong:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. The next label printing of this product must use this labeling unless subsequent changes have been approved. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

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Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Eric Bohnenblust by phone at (703) 347-0426, or via email at [Bohnenblust.eric@epa.gov](mailto:Bohnenblust.eric@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read 'Gebken', written in a cursive style.

Richard Gebken  
Product Manager 10  
Invertebrate & Vertebrate Branch 2  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

[Loveland Products, Inc. Logo here]

# Acephate 90SP Insecticide

**ACTIVE INGREDIENT:**

	% Composition
Acephate (O,S-Dimethyl acetylphosphoramidothioate).....	90.00%
OTHER INGREDIENTS: .....	10.00%
<b>TOTAL</b>	<b>100.00%</b>

[Editor's Note for Reviewers: [Brackets] indicate optional passages]

## KEEP OUT OF REACH OF CHILDREN CAUTION

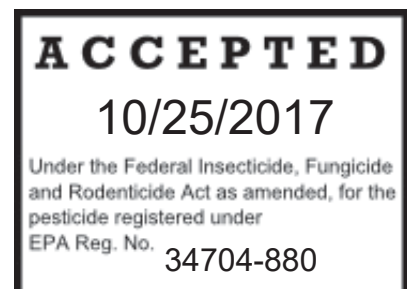
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.  
(If you do not understand this label, find someone to explain it to you in detail).

For Additional Precautionary Statements, Directions for Use, Storage and Disposal and Other Use Information,  
See Inside this Label Booklet.

<b>FIRST AID</b>	
<b>Acephate is an organophosphate, cholinesterase inhibitor.</b>	
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Call a 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 a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <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> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <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 a poison control center or doctor for treatment advice.</li> </ul>
<b>Note to Physician:</b> Acephate is a cholinesterase inhibitor. If signs of cholinesterase inhibition appear, atropine is antidotal. 2-PAM may also be used in conjunction with atropine but should not be used alone.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.</b>	

EPA Reg. No. 34704-880  
 EPA Est. No. 51036-GA-1  
 Net Contents \_\_\_\_\_ LBS. (\_\_\_\_\_ KG)  
 [Print code inserted here]

[EPA Master Label—04/17]



Formulated for:  
 LOVELAND PRODUCTS, INC.  
 PO BOX 1286, GREELEY CO 80632-1286

Acephate 90SP Insecticide  
EPA REG. NO. 34704-880

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**  
**CAUTION**

Harmful if swallowed. Causes eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash hands thoroughly after handling. Do not allow children or pets to come into contact with treated areas until sprays have dried.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Wear waterproof gloves. Materials that are chemical-resistant to this product are Barrier Laminate, Polyethylene, or any of these at  $\geq 14$  mils: Butyl Rubber, Nitrile Rubber, Neoprene Rubber, Natural Rubber, Polyvinyl Chloride, and Viton.

**Mixers loaders, applicators and other handlers must wear:** long-sleeved shirt and long pants, socks and shoes, chemical resistant gloves for all mixers and loaders and for applicators using handheld application equipment.

See engineering controls for additional requirements.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/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 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.

**Engineering Controls**

Water-soluble packets when used correctly qualify as a closed mixing/loading system under the Worker Protection Standard for Agricultural Pesticides [40 CFR 170.240(d)(4)]. Mixers and loaders handling this product while it is enclosed in intact water soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks, a chemical-resistant apron, and chemical-resistant gloves. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "**Mixers, loaders, applicators and other handlers must wear:**" and have such PPE immediately available for use in an emergency, such as a spill or equipment break-down.

Pilots must use an enclosed cockpit in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)].

The use of human flaggers is prohibited.

**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 equipment washwaters.

This product is highly toxic to bees exposed to treatment and 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.

Aerial applications to turf are prohibited

Do not apply using low-pressure hand wand equipment

Maximum Application Rates for Sod and Golf Course Turf: Limit 3 lbs ai/A for Sod Farms. Limit 4 lbs ai/A for Golf Course.

Pre-harvest Interval for Sod Farms: a 3-day pre-harvest interval (PHI) for harvesting sod.

Maximum Application Rates for specified Greenhouse and Outdoor ornamental: Limit 1 lb ai/A per 100 gallons of water (not to exceed

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0.75 lbs ai/A for cut flowers and 1.0 lbs ai/A for all other ornamentals).

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.

**CHEMIGATION**

Application by chemigation is prohibited.

**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 instruction 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, chemical-resistant gloves of any waterproof material, shoes plus socks and chemical-resistant headgear for overhead exposure.

**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. For other uses, including golf courses and other non-agricultural areas, do not enter or allow others to enter until sprays have dried.

**Spray Drift Restrictions**

Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals. For ground boom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy and when wind speed is 10 mph or less at the application site as measured by an anemometer. Use fine or medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles.

For airblast applications, direct spray above foliage and turn off outward pointing nozzles at row ends and outer rows. Apply only when wind speed is 3 -10 mph at the application site as measured by an anemometer outside of the treated area on the upwind side. For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3 - 10 mph as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or the crop canopy.

The applicator also must use all other measures necessary to control drift.

**INSTRUCTIONS FOR USING WATER SOLUBLE PACKAGES DIRECTLY INTO SPRAY TANKS:**

Water Soluble Packages (WSPs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSP. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSPs. WSPs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

**Handling Instructions**

Follow these steps when handling pesticide products in WSPs.

1. Mix in spray tank only.
2. Handle WSP(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
3. Keep the WSP(s) in outer packaging until just before use.
4. Keep the WSP dry prior to adding to the spray tank.
5. Handle with dry gloves and according to the label instructions for PPE.

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6. Keep WSP intact. Do not cut or puncture WSP.
7. Reseal the WSP outer packaging to protect any unused WSP(s).

**Mixing Instructions**

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 9 below take precedence over the mixing directions of the other tank mix products. WSPs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. Do not tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
2. Fill tank with water to approximately one-third to one-half of the desired final volume of spray.
3. Stop adding water and stop any agitation.
4. Place intact/unopened WSP(s) into the tank.
5. Do not spray water from a hose or fill pipe to break or dissolve the WSP(s).
6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.
7. Dissolving the WSP(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
8. Stop agitation before tank lid is opened.
9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSPs have fully dissolved and the contents have been thoroughly mixed into the solution.
10. Do not add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
11. Once the WSP have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
12. Use the spray solution when mixing is complete.
13. Maintain agitation of the diluted pesticide mix during transport and application.
14. It is unlawful to use any registered pesticide, including WSPs, in a manner inconsistent with its label.

**TABLES OF EQUIVALENTS**

Rates of Acephate 90 SP Insecticide Per Acre	Acres Treated by a 1 lb. Packet
2.5 oz.	6.4
3.2 oz.	5
3.25 oz.	4.9
0.25 lb.	4
0.28 lb.	3.57
0.5 lb.	2
0.56 lb.	1.79
0.8 lb.	1.25
1.0 lb.	1

Rates of Acephate 90 SP Insecticide per 1000 sq. ft.	1000s of sq. ft. Treated by a 1 lb. Packet
0.4 oz.	40.0
0.83 oz.	19.3
1.0 oz.	16.0
1.2 oz.	13.3
1.25 oz.	12.8
1.6 oz.	10

**NON-CROP AREAS**

**Non-crop Areas - Field Borders, Fencerows, Roadsides, Ditchbanks, Borrow Pits**

**Recommendations for Use**

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ACEPHATE 90SP PER ACRE	REMARKS
FOLIAR	Grasshoppers	0.25 lb. (4 oz.)	For Early to mid-season application.

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By Ground: 10 to 20 gals/A of Spray By Air: 1 to 5 gals/A of Spray (minimum of 5 gals/A in CA)		Use 1 - 1 lb water soluble pouch to treat 4 acres.	Use the higher volume when spraying dense foliage. An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.
USE PRECAUTION: Do not graze or feed vegetation cut from treated areas.			

**NON-CROP AREAS-WASTELAND**

**Recommendations for Use**

APPLICATION METHOD	PESTS CONTROLLED	RATES OF ACEPHATE 90SP PER ACRE	REMARKS
By Ground: 10 to 20 gals/A of Spray By Air: 0.5 gal/A of Spray (minimum of 5 gals/A in CA)	Black Grass Bugs Grasshoppers Mormon Cricket	1.6 oz. to 2.2 oz. Use 1 - 1 lb water soluble pouch to treat 10 acres.	Use the higher volume when spraying dense foliage. An approved drift retardant may be added to aid in controlling drift and reducing evaporation of aerial sprays.
USE PRECAUTION: Do not make more than one application per season. Do not graze or feed vegetation cut from treated areas. Do not allow animals to graze on treated areas.			

**SPECIALTY USES CONTAINER GROWN NURSERY STOCK**

PLANTS	INSECTS	AMOUNT ACEPHATE 90SP	TIME OF APPLICATION	RECOMMENDED APPLICATION
Container Grown Nursery Stock (Arborvitae, Azalea, Camelia, Rhododendron, Roses, Viburnum, Yew)	Black Vine Weevil, Strawberry Root Weevil	0.8 lb. (12.8 oz)	Application should be made by mid-September for green-house stock and by mid-October for outdoor stock. Consult your local extension agent for information on the identification and control of root weevils on ornamentals. For repeated applications, use a minimum spray interval of 7 days.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90SP per 125 gals. of solution so as to thoroughly drench the root system.
	Ants, including Imported Fire Ants and Harvester Ants	0.8 (12.8 oz)	Apply as needed to control the pest. For repeated applications, use a minimum spray interval of 7 days.	

**TREES AND SHRUBS – ORNAMENTAL**

PLANTS	INSECTS	AMOUNT ACEPHATE 90SP	TIME OF APPLICATION	RECOMMENDED APPLICATION
Trees and Shrubs (except Flowering Crabapple, see below)	Aphids, Bagworms, Birch Leafminer, Tent Caterpillar,* Lace Bugs, Leafrollers	0.28 lb (4.5 oz) Use 1 - 1 lb water soluble pouch per 400 gallons of water	As the insects begin to appear. Repeat application at 3-day intervals may be necessary.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90 SP in the specified amount of water. Water with a hydraulic sprayer. The addition of a suitable sticker improves control of Gypsy Moth Larvae. *Mist blower application. Adjust rates to 2 lbs. per 200 gals. water for Gypsy Moth control and 4 lb. per 400 gals. water for Tent Caterpillar control. Do not apply to Huckleberry, Balm of Gilead, cottonwood, Lombardy Poplar and Viburnum suspensum. Nursery crops. Before treating large
	Douglas Fir Tussock, Moth Larvae, Gypsy Moth Larvae*,	0.5 lb (8 oz) Use 1 - 1 lb water soluble pouch per 200 gallons of	As the insects begin to appear. Repeat application at 3-day intervals may be necessary.	



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	Webworms	water		plantings, spray only a few plants and observe two weeks for phytotoxicity.
	Scales (Crawlers)	0.5 lb (8 oz) Use 1 - 1 lb water soluble pouch per 200 gallons of water	As crawlers begin to appear. Repeat applications, at a 2 week or more interval, may be necessary where there is continuous crawler production.	
	Ponderosa Pine Needle Miner	0.5 lb (8 oz)	Time of application is important. Repeat application at 3-day intervals may be necessary. Consult your Farm Advisor or County Extension Agent.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90SP in 200 gals. water with a hydraulic sprayer as a full coverage spray.
	Grasshoppers	0.5 lb (8 oz)	As the grasshoppers begin to appear. Repeat application at 3-day intervals may be necessary.	
	California Oakworm, Cankerworms (Spring & fall)	0.28-0.5 lb (4.5 to 8 oz) Use 1 to 2 - 1 lb water soluble pouches per 400 gallons of water	As the insects begin to appear. Use the higher amount when the larger larvae are present. Repeat application at 3-day intervals may be necessary.	Apply the specified amount of ACEPHATE 90 SP in the specified amount of water with a hydraulic sprayer.
	Nantucket Pine Tip Moth Larvae	0.8 lb (12.8 oz) Use 1 - 1 lb water soluble pouch per 125 gallons of water	Time of application is important. Consult your Farm Advisor or County Extension Agent. Repeat applications at 7-day intervals will be required for subsequent generations.	
	Root Weevil Adults	0.8 lb (12.8 oz) Use 1 - 1 lb water soluble pouch per 125 gallons of water	Apply when first feeding damage occurs. Repeat applications, at four week intervals until the first heavy frost, may be necessary for complete foliage protection.	
	Box Elder bugs, Sawflies, Budworms, Leafhoppers	0.8 lb (12.8 oz) Use 1 - 1 lb water soluble pouch per 125 gallons of water	As the insects begin to appear. For repeated applications, use a minimum spray interval of 7 days.	
	Japanese Beetle	1.1 lbs (17.6 oz) Use 1 - 1 lb water soluble pouch per 100 gallons of water	As the Japanese Beetles begin to appear. Repeat applications, at 2 week intervals, may be necessary.	
	Elm Leaf Beetle (larvae)	1.1 lb (17.6 oz) Use 1 - 1 lb water soluble pouch per 100 gallons of water	As the larvae begin to appear. ACEPHATE will not prevent Elm Leaf Beetle eggs from hatching. For repeated applications, use a minimum spray interval of 7 days.	
Douglas Fir, Christmas Trees	Douglas Fir Needle Midge	0.5 lb (8oz) (0.5 lb. per acre)	Application should be made more than 2 weeks prior to bud burst. Repeat application at 3-day intervals may be necessary. For additional pest management information, consult your county extension service.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90 SP in not less than 2 gals. of spray per acre by air or in 200 gals. of spray per acre by ground.



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Flowering Crabapples	Aphids, Tent Caterpillars, Leafrollers	0.28 lb (4.5 oz)	As aphids begin to appear. Do not apply more often than 3 times in a growing season at a 4 week interval.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90 SP in 400 gals. water with a hydraulic sprayer. Caution: Phytotoxicity has occurred in Crabapple varieties: Hopa, Ichonoski, Malusfloribunda, Pink Perfection, Red Cloud and Snow Cloud.
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**COMMERCIAL TURFGRASS  
(Golf course and Sod Farm Turf Only)**

DO NOT ALLOW LIVESTOCK TO GRAZE TREATED AREAS.

DO NOT FEED TREATED GRASS TO LIVESTOCK.

NOT FOR USE ON RESIDENTIAL LAWNS.

PLANTS	INSECTS	AMOUNT ACEPHATE 90SP	TIME OF APPLICATION	RECOMMENDED APPLICATION
Commercial Turfgrass (Golf Course and Sod Farm only)	Fall Armyworm, Yellow Striped armyworm, Southern Armyworm	0.4 to 1.2 oz. (1.1 to 3.3 lbs per acre) Maximum of 1 - 1 lb water soluble pouches per 2,270 sq ft.	As the insects appear. A repeat application at 2 week intervals may be necessary.	Apply the specified amount of ACEPHATE 90SP per 1,000 sq ft. Use a minimum of 5 gals water per 1,000 sq ft to obtain good coverage.
	Cutworm	Golf Courses - 1 to 1.6 oz (2.75 to 4.35 lbs per acre)* Maximum of 1 - 1 lb. water soluble packages per 1,700 sq ft.  Sod Farms - 1 to 1.2 oz (2.75 to 3.3 lbs per acre)* Maximum of 1 - 1 lb. water soluble packages per 2,270 sq ft.		
	Chinch bugs	Golf Courses - 1 to 1.6 oz. (2.75 to 4.35 lbs per acre)* Maximum of 1 - 1 lb water soluble packages per 1,700 sq ft.  Sod Farms - 1 to 1.2 oz. (2.75 to 3.3 lbs per acre)* Maximum of 1 -	Apply as needed on 10-14 day intervals for adult population knockdown.	Apply the specified amount of ACEPHATE 90SP per 1,000 sq ft. Use 1 to 15 gals water per 1,000 sq ft to obtain good coverage.

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		1 lb water soluble packages per 2,270 sq ft.		
	Fleas	Golf Courses - 1 to 1.6 oz. (2.75 to 4.35 lbs per acre)* Maximum of 1 - 1 lb water soluble packages per 1,700 sq ft.  Sod Farms - 1 to 1.2 oz. (2.75 to 3.3 lbs per acre)* Maximum of 1 - 1 lb water soluble packages per 2,270 sq ft.	Apply as needed on 7-10 day intervals for adult population knockdown.	
	Sod Webworm (Crampus spp)	0.4 to 0.83 oz (1.1 to 2.25 lbs per acre) Maximum of 1 - 1 lb water soluble pouches per 3,280 sq ft.	As sod webworms begin to appear. Use the higher amount when quick knock down is needed or with heavy infestations. Repeat application may be necessary. Do not repeat at more than 1 week intervals.	
	Leafhopper	0.83 oz (2.25 lbs per acre) Maximum of 1 - 1 lb water soluble pouches per 3,280 sq ft.	As the leafhoppers begin to appear. A repeat application at 1 week intervals may be necessary.	
	Mole Crickets (Except CA) Spittlebug (Except CA)	Golf Courses - 0.83 to 1.6 oz. (2.25 to 4.35 lbs per acre)* Maximum of 1 - 1 lb water soluble packages per 1,700 sq ft.  Sod Farms - 0.83 to 1.2 oz. (2.25 to 3.3 lbs per acre)* Maximum of 1 - 1 lb water soluble packages per 2,270 sq ft.	As mole crickets begin to appear. For knock down of existing populations, more than one application may be required throughout the growing season at 7-day intervals. For heavy infestations, use the higher dosage rate.	Apply the specified amount of ACEPHATE 90SP per 1,000 sq ft. Use 1 to 15 gals water per 1,000 sq ft to obtain good coverage. Apply during late after- noon or early evening hours and after an irrigation. Do not irrigate after application. The use of a lemon fragrance substance in the spray mix may enhance control by acting as a flushing agent and thus increasing the mole cricket contact with ACEPHATE 90SP. The following lemon-scented products have been shown to be effective flushing agents. Lemon Joy, Lemon Palmolive and Might Myrt Products Manufacturer-Base Pure Lemon Fragrance. The use rate for lemon- scented products is 2 teaspoons per gallon of water for small total mix volumes or 6 fl. oz. Per 50 gals. of water for a large total mix volume.
	Greenbug (Schizaphis graminun)	0.4 oz (1.1 lbs per acre) Maximum of 1 -	Apply when insects or their damage first appears. Repeat as necessary. Application is not	Apply the specified amount of ACEPHATE 90SP per 1,000 sq ft. use 4 to 15 gals water per 1,000 sq ft to obtain good coverage. Do not

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	Grasshoppers	1 lb water soluble pouch per 6,810 sq ft.	to be repeated at more than 1 week intervals.	mow turfgrass for at least 24 hours after application.
	Black Turfgrass Ataenius (Except CA)	1.25 to 1.6 oz (3.4 to 4.3 lb per acre) Use 1 - 1 lb water soluble pouches per 1,700 sq ft Golf Course application only	Apply when insects or their damage first appear.	Apply the specified amount of ACEPHATE 90SP per 1,000 sq ft. use a minimum of 5 gals water per 1,000 sq ft. Irrigate lightly after application (not more than 0.5 inch). Use the higher rate for severe infestations.
Dichondra (Sod farm and Golf Courses)	Cutworm, Flea Beetle, Southern Armyworm, Yellow Striped Armyworm	Golf Courses - 0.83 to 1.6 oz. (2.25 to 4.35 lbs per acre)* Maximum of 1 - 1 lb water soluble packages per 1,700 sq ft.  Sod Farms - 0.83 to 1.2 oz. (2.25 to 3.3 lbs per acre)* Maximum of 3 - 1 lb water soluble packages per 2,270 sq ft.	As the insects appear. Repeat at 2 week intervals as necessary.	Apply the specified amount of ACEPHATE 90SP per 1,000 sq ft. Use a minimum of 15 gals water per 1,000 sq ft to obtain good coverage.

\* Maximum Application Rates for Sod and Golf Course Turf: Limit 3 lbs ai/A for Sod Farms. Limit 4 lbs ai/A for Golf Course.  
 Pre-harvest Interval for Sod Farms: a 3-day pre-harvest interval (PHI) for harvesting sod.

**OUTDOOR AND PERIMETER SPRAY**  
**NOT FOR USE ON RESIDENTIAL TURF GRASS**

PLANTS	INSECTS	AMOUNT ACEPHATE 90SP	TIME OF APPLICATION	RECOMMENDED APPLICATION
Outdoor and Perimeter area	Wasps	1.3 oz.	Treat early or late in the day, as wasps are generally less active during these times.	Apply 1 - 1 lb. water soluble pouch of ACEPHATE 90SP in a minimum 12 gallons of water used. Apply as a spot treatment to the nest, nest entrance and surrounding areas where the wasps alight.
	Ants, including Imported Fire Ants and harvester Ants, Crickets, Cockroaches, Earwigs, Pillbugs	1.3 oz.	As the insects appear.	Apply 1 - 1 lb. water soluble pouch of ACEPHATE 90SP in a minimum of 12 gallon of water used. Apply to a band of soil 6 to 10 feet adjacent to the structure and to the height of 2 to 3 feet on the foundation where pests may be active or may find entrance. Also apply as a residual spray or with a paint brush to surfaces of buildings, window frames, shutters, entry-ways, screens, eaves, patios, garages, carports, around garbage areas and other areas where these pests congregate.

**OUTDOOR FLORAL CROPS AND GROUND COVERS**

PLANTS	INSECTS	AMOUNT ACEPHATE	TIME OF APPLICATION	RECOMMENDED APPLICATION
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		<b>90SP</b>		
Boston Ivy	Japanese Beetle	1.1 lbs (17.6 oz)	As the Japanese beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90SP in 200 gals water with a hydraulic sprayer as a full coverage spray. Multiple applications may cause slight tip burn or marginal leaf necrosis on some varieties. Test on a few plants to determine varietal susceptibility.
Chrysanthemums, Daisies, Dahlias, Easter Lily, Gladioli, Gypsophila, Pachysandra, Peony, Sedum, Statice, Strawflower, Yarrow, Zinnia	Aphids, Thrips, Lygus	0.5 lb (8 oz)	As insects begin to appear. Repeat application at 3-day intervals may be necessary.	
Roses	Aphids, Thrips, Lygus	0.5 lb (8 oz)	As insects begin to appear. Repeat application at 3-day intervals may be necessary.	
	Japanese Beetle	1.1 lbs (17.6 oz)	As the Japanese beetles begin to appear. Repeat applications at 2 week intervals may be necessary.	

**GREENHOUSE FLORAL AND FOLIAGE PLANT CROPS**

<b>PLANTS</b>	<b>INSECTS</b>	<b>AMOUNT ACEPHATE 90SP</b>	<b>TIME OF APPLICATION</b>	<b>RECOMMENDED APPLICATION</b>
Carnations, Chrysanthemums	Aphids, Thrips	0.5 lb (8 oz)	As aphids begin to appear. As thrips begin to appear or at the right flower bud stage.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90SP in 200 gals water with a hydraulic sprayer as a full coverage spray. Do not apply more often than once every 28 days. Caution: Phytotoxicity has occurred on the following Chrysanthemum varieties: Albatross, Bonnie Jean, Dixie, Garland, Gent, Iceberg, Pride, Showoff, Statesman, Tally Ho, Westward Ho, and wild Honey. Before treating large plantings, spray only a few plants and observe two weeks for varietal phytotoxicity. Do not apply to Chrysanthemums and Roses with open flowers.
Foliage Plants, Orchids Anthuriums, Cacti, Poinsettia	Aphids	0.28 lb (4.5 oz) Use 1 - 1 lb water soluble pouch per 400 gallons of water per acre.	As aphids begin to appear. Repeat application at 3-day intervals may be necessary.	Apply the specified amount of ACEPHATE 90SP in the specified amount of water with a hydraulic sprayer as a full coverage spray. The addition of a wetting agent may be required on difficult to wet foliage. Caution: Phytotoxicity has occurred on the following foliage plants: Bletchum gibbum, Cissus antarctica, Ficus triangularis, Fittonia verscaffelii, Maranta leuconeura kerchoviana, Pachystachya lutea, Pleactranthus australis, Polypodium aureus, Polycstichum, Pteris ensiformis, Tolmiea
	Mealybugs, Thrips, Whiteflies	0.5 lb (8 oz) Use 1 - 1 lb water soluble pouch per 200 gallons of water per acre.	As the insects begin to appear. A repeat application, at a 2 week interval, may be necessary for control of mealybugs and whiteflies.	

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	Scales (crawlers)	0.5 lb (8 oz) Use 1 - 1 lb water soluble pouch per 200 gallons of water per acre.	As crawlers begin to appear. Repeat applications, at a 2 week or more interval, may be necessary where there is continuous crawler production.	menziesii. Before treating large plantings spray only a few plants and observe 2 weeks for varietal phytotoxicity. Applications of ACEPHATE SC on Poinsettias after bract formation may result in phytotoxicity in certain varieties.
	Sweet Potato Whiteflies (except CA)	0.28 lb (4 oz) Use 1 - 1 lb water soluble pouch per 400 gallons of water plus  TAME 2.4 EC Spray 10 2/3 fl oz (0.2 lb ai) per acre.	Apply when insects first appear. If a population is well established, make one application of the tank mix and follow 5 to 7 days later with TAME alone at 16 fl oz/400 gals. See TAME label for instructions.	For sweet potato whitefly control, apply the specified amounts of ACEPHATE 90SP plus TAME 2.4 EC Spray as a tank mix at the specified volume necessary to obtain good coverage. Follow the TAME plus ACEPHATE and TAME alone and the rotation instructions to avoid potential resistance.
Roses	Leafroller	0.5 to 0.8 lb (8 to 12.8 oz)	As leafrollers begin to appear. Use the higher amount when the large larvae are present. For repeated applications, use a minimum spray interval of 7 days.	Apply 1 - 1 lb water soluble pouch of ACEPHATE 90SP in 200 gals water per acre with a hydraulic sprayer as a full coverage spray. Do not apply to Roses with open flowers for Aphid and Thrip control.
	Aphids, Thrips	0.5 lb (8 oz)	As aphids begin to appear. As thrips begin to appear or at the right flower bud stage. Repeat applications at 3-day intervals may be necessary.	

Maximum Application Rates for specified Greenhouse and Outdoor ornamental: Limit 1 lb ai/A per 100 gallons of water (not to exceed 0.75 lbs ai/A for cut flowers and 1.0 lbs ai/A for all other ornamentals).

Observe all precautions and limitations on labeling of all products used in mixture. 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.

NOTE: This product is sold by weight and package is full when packed but due to fluffy nature this material is inclined to settle.

**STORAGE AND DISPOSAL**

**PROHIBITIONS:** Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.  
**STORAGE:** Keep pesticide in original containers. Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Protect from excessive heat. Do not contaminate food or foodstuffs. Do not store or transport near feed or food.  
**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.  
**CONTAINER DISPOSAL:** If burned, stay out of smoke. **For help with any spill, leak, fire or exposure involving this material, call Chemtrec — 1-800-424-9300.**

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

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Subject to the foregoing inherent risks, LOVELAND PRODUCTS, INC. 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 when the product is used in strict accordance with such Directions for Use under normal conditions of use. EXCEPT AS WARRANTED IN THIS LABEL AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THIS PRODUCT IS SOLD "AS IS," AND LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ELIGIBILITY OF THIS PRODUCT FOR ANY PARTICULAR TRADE USAGE.

IN THE UNLIKELY EVENT THAT BUYER OR USER BELIEVES THAT LOVELAND PRODUCTS, INC. HAS BREACHED A WARRANTY CONTAINED IN THIS LABEL AND TO THE EXTENT REQUIRED BY APPLICABLE LAW, BUYER OR USER MUST SEND WRITTEN NOTICE OF ITS CLAIM TO THE FOLLOWING ADDRESS: LOVELAND PRODUCTS, INC., ATTENTION: LAW DEPARTMENT, P.O. BOX 1286, GREELEY, CO 80632-1286.

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- ®AMMO - Reg. TM of FMC Agri Chemical Group for cypermethrin insecticide.
- ®ASANA - Reg. TM of E.I. duPont de Nemours & Co. for esfenvalerate insecticide.
- ®BAYTHROID - Reg. TM of Mobay Corp. for cyfluthrin synthetic pyrethroid.
- ®CAPTURE - Reg. TM of FMC Agri Chemical Group for bifenthrin insecticide miticide.
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- ®POUNCE - Reg. TM of FMC Agri Chemical Group for permethrin insecticide.
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