ACJet Systemic Insecticide for Micro-Infusion®


ACTIVE INGREDIENT:
- Acephate [O,S-Dimethyl Acetyl Phosphorothioate] 97.4%
- Other Ingredients 2.6%

TOTAL: 100%

EPA Reg. No. 74578-2 • EPA Est. No. 74578-MA-001

Net Contents: 20 Packets at 0.539 oz. (15 grams) each

KEEP OUT OF REACH OF CHILDREN

CAUTION
STOP - READ THE ENTIRE LABEL BEFORE USE.
AVOID PrecificatSun or use. Satures. NeXt 90 days use. This is because it is a product that is typically used as a tree injection system. If the label is not fully explained to you, contact the manufacturer or the Arborjet Inc. for further information.

MADE FOR: ARBORJET INC., 866-480-0790 (866-723-2758), 99 Bayehorn Hill Road, Andover, MA 01810

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION Harmful if swallowed. Avoid contact with eyes and skin, and avoid breathing dust or spray mist. Wash hands thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)
Some materials that are chemical-resistant to this product are polyethylene and polyvinyl chloride. Users, loaders, applicators and other handlers must wear:
- Long-sleeved shirt and long pants
- Gloves
- Respirator or mask
- Protective eyewear

In addition, all mixers and loaders and all applicators must wear a NIOSH approved dust mask filtering respirator with a NIOSH approved respirator with an N95, P100 or HEPA filter. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY REQUIREMENTS
- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing immediately after pesticide is inside. Then wash thoroughly and put on clean clothing.
- Users should remove pesticide immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

FIRST AID

IF SWALLOWED:
- Call a poison control center 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 center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES:
- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for further treatment advice.

IF INHALED:
- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING:
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

Note to Physician: Ornithinephosphates are cholinesterase inhibitors. If signs of cholinesterase inhibition appear, atropine is antidotal. 2-PAM also may be used in conjunction with atropine but should not be used alone.

ENVIRONMENTAL HAZARDS: This pesticide is highly toxic to birds. Do not apply to areas where surface water is present, or to stream or ditches below the high water mark. Do not contaminate water when disposing of equipment washing water.

PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame.

DIRECTIONS FOR USE

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

Agricultural and commercial use only. Not for use or storage around the home.

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, forest, 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). The requirements in this box only apply to use of this product that is covered by the Worker Protection Standard.

No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is injected into agricultural crops, forest, nurseries, and greenhouses. Apply this product only in accordance with its labeling and with the Worker Protection Standard.

IMPORTANT: Read the entire label before use. Failure to follow label directions may result in poor control or plant injury. Failure to follow label directions may cause injury to people, animals, and environment. The buyer accepts and understands that failure to follow label directions is the responsibility of the buyer. Do not use this product on food bearing trees or shrubs or on or near shrubs that will bear food within one year after application.

APPLICATION TO ORNAMENTALS: ACEJet is for use on trees & landscape ornamentals including conifers, Christmas tree & deciduous tree farms and plantations. ACEJet is an infusible insecticide formulated to translocate in the plant vascular system from the microinjection site(s). To assure optimum effectiveness; this product must be placed into the active sapwood.

DIRECTIONS

ACEJet is designed for use only with the Arborjet Tree Injection Systems specified on this label. The specified dosages and number of application sites are based on tree diameter. Measure the tree diameter at breast height (54" from ground) in order to find the Diameter at Breast Height (DBH). Measuring circumference, divide this number by thirty to determine Diameter at Breast Height (DBH). Best uptake is in trees in full leaf. Conditions that favor transpiration (i.e., sunny, breezy, low humidity) are optimal for injection uptake. Treat conifers in the early morning during hot, dry periods; for optimum uptake. Micro-injection of trees stressed by drought or extreme heat may result in poor uptake or foliar injury; irrigate trees prior to treatment for optimal product uptake.

ARBORETUM MICRO-INJECTION AND MICRO-INFUSION PROCEDURES

In choosing between Micro-injection and Micro-Infusin® procedures, it is important to consider treatment needs. Micro-injection applications are designed for short-term activity against pests as compared to Micro-infusion®. Micro-infusion® dosages are designed to deliver higher volumes of water to compensate for the drop in concentration of A or B reported in large trees and to extend the period of product activity against pests as compared to a Micro-infusion application. For optimum distribution, inject into the sapwood tissues at the base of the tree. Work around the tree, injecting no closer than 6 inches apart.

ALTERNATE ARBORETUM STINGER PROCEDURE: Alternatively install the (7/32" drill bit) STINGER injector tip 5/8" deep into the sapwood with a hand push or by gently tapping the injector tip into prebored hole with a mallet. Remove STINGER® upon completion of treatment process by twisting and pulling counter clockwise. Recommend using a disinfectant such as CLEANJet® between trees when using the reusable STINGER® tips.

RESINOUS CONIFERS: In resinous conifers, such as pine and spruce, start the injection and/or infusion process immediately after drilling or following the setting of the Arborjet® in the sapwood. A prolonged delay may reduce uptake efficacy due to resin flow.

ORNAMENTAL NONCOTTONS: Make applications low in the stem, typically with 1/2" of the soil. Avoid wounding the mesocotyl tissue located within the crown of the plant. In pine™, drill into the central vascular bundle approximately one-third into the stem, insert an Arborjet® 5/8" deep to form a seal and use the VIPER needle to complete the application. Only one site is needed.

*Not for use in California

MIXING INSTRUCTIONS: Mix each 15 gram ACEJet packet per 100 milliliters of water. Refer to the Dosage Tables below to determine the number of packets and total volume needed to mix for tree application. Mix only the amount needed for immediate use. Empty the contents of the packet into the injection cannister. Add the appropriate amount of water to the container. Use distilled water or sterile to neutral water (pH 5.5-7.0). Close the container by screwing on the lid. Next, swirl the contents THROUGHOUT until all the ACEJet is dissolved.

ARBORETUM SYSTEMS

AIR/HYDRAULIC MICRO-INJECTION APPLICATION: Prepare the solution following the mixing instructions above. To Inject, set the primary regulator to 75 PSI charge the Dose-Sizer® by pushing back on Dose-Sizer® knob after priming and apply the specified dose evenly into the preset Arborjet® ports.

HAND-OPERATED MICRO-INJECTION APPLICATION: Prepare the solution following the mixing instructions above. Close and hand pump or pressure to between 15 and 25 PSI. Charge the Dose-Sizer® by pushing back on Dose-Sizer® knob, then apply specified dose evenly into the preset Arborjet® ports.

QUICK-JET MICRO-INJECTION APPLICATION: Prepare the solution following the mixing instructions above. To Micro-Inject set the Arborjet Tree Micro-Injector to the 3 mL/per shot setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the specified dose per injection site is delivered. Refer to the Tree Micro-Injection Dosage Table to determine the volume in milliliters to be delivered and number of injection sites to apply.

TREE IV MICRO-INFUSION APPLICATION: Prepare the solution following the mixing instructions above. Close and pressure its contents into the 25 to 30 PSI and prime the line by opening each injector valve slowly and pushing the air out of the VIPER needs into the Arborjet® ports to begin the infusion. Remove when application is complete. Refer to the Micro-Infusion Dosage Table to determine the volume in milliliters to be delivered and number of application sites to apply.

Insert 6/15/10
### TREE MICRO-INJECTION DOSAGES

<table>
<thead>
<tr>
<th>Tree DBH*</th>
<th># injection sites</th>
<th>mL/kg injection site</th>
<th>mL applied/tree</th>
<th>mL applied/tree (high)</th>
<th>mL applied/tree (low)</th>
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<tbody>
<tr>
<td>5 - 7&quot;</td>
<td>3</td>
<td>9</td>
<td>27</td>
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<tr>
<td>8 - 10&quot;</td>
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<tr>
<td>11 - 13&quot;</td>
<td>6</td>
<td>9</td>
<td>54</td>
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<tr>
<td>14 - 16&quot;</td>
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<td>9</td>
<td>72</td>
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<td>71 - 73&quot;</td>
<td>36</td>
<td>9</td>
<td>324</td>
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</tbody>
</table>

*The number of injection sites may be reduced to one injection site every 8" of stem circumference; however the mL/microinjection sites needs to be increased to 1.15 mLs to deliver the specified dosage in the Tree Micro-Infusion Dosages Table.

**Refer to the Micro-Infusion® Dosage Table for high rate applications.

### CLEAN-UP

**IMPORTANT** It is critical to rinse the Arborjet System thoroughly after use. Use CLEAN-jet soap and water or isopropyl alcohol. Residues left in the device may gum the internal components.

### COMPATIBILITY

ACE-jet is compatible with all Arborjet fertilizers including the MicroJet influsive series. However, the physical compatibility of ACE-jet should be tested before use with other products.

To determine the physical compatibility of ACE-jet with other products, use a jar test as described below.

1. Using a pint jar, add the proportionate amounts of the two products to 1 pint of water.

2. Allow thoroughly mixing, let stand for at least 5 minutes. If the combination remains mixed or can be remixed, it is physically compatible. If precipitates form, the combination is incompatible.

### WHEN TO TREAT

Apply when signs of insects first appear. ACE-jet is effective against actively feeding insects. However, insect activity should be monitored to establish a damage threshold for retreatment. Repeat applications as necessary.

### RESTRICTIONS

- Keep away from children.
- Keep away from heat and open flame.
- Do not treat trees that are moisture stressed or suffering from herbicide damage.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

### STORAGE AND DISPOSAL

Do not contaminate water, food, feed or storage or disposal.

PESTICIDE STORAGE: Keep product in original container. Store product in a cool dry place. Do not contaminate food or feed stuff. Do not store or transport near food or feed.

PESTICIDE DISPOSAL: Washes resulting from the use of this product should be disposed of according to the Directions for Use, i.e., used as directed in the injection equipment.

CONTAINER HANDLING: Non-refillable container. Do not reuse or refill this container. Completely empty contents of packages into injection equipment. Dispose of empty packages in a sanitary landfill or by incineration if approved by State and Local authorities. Offer cardboard container for recycling, if available.

**NOTICE OF WARRANTY**

ARBORjet® Inc. makes no warranty of fitness of this product for any other purpose, beyond its use under normal conditions in keeping with the statements made on this label.
SYSTEMIC INSECTICIDE

Micro-Injectable and Micro-Infusible Insecticide for use with the Arborjet Injection Systems in the Management of Specific Insect Pests of Trees and Landscape Ornamentals including Conifers, Christmas Tree and Deciduous Tree Farms, Seed Orchards and Plantations, and Forest Trees.

ACTIVE INGREDIENT:

Acephate
[O,S-Dimethyl Acetyl Phosphoramidothioate] ........................................... 97.4%

OTHER INGREDIENTS ................................................................. 2.6%

TOTAL .................................................................................. 100.0%

EPA Reg. No. 74578-2 • EPA Est. No. 74578-MA-001

Net Contents: 20 Packets at 0.529 oz. (15 grams) each

STOP! READ ENTIRE LABEL BEFORE USE.
AVISO Precaución al usuario: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

To the user: If you cannot read or understand English, do not use this product until the label has been fully explained to you.

PRECAUTIONARY STATEMENTS:
HAZARDS TO HUMANS AND DOMESTIC ANIMALS! CAUTION Harmful if swallowed. Avoid contact with eyes, skin and clothing. Avoid breathing dust or spray mist. Wash hands thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.
See attached leaflet for additional precautionary statements, first aid, and complete directions for use.

PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame.

KEEP OUT OF REACH OF CHILDREN
CAUTION

See insert for additional precautions and first aid.

Arboriculture in Motion® and Micro-Infusion® are registered trademarks of Arborjet, Inc.

Box 6/15/10
WHEN TO TREAT:
Apply when signs of insects first appear.

COMPATIBILITY:
ACE-jet is compatible with all Arborjet fertilizers including the MICRO-Jet infusible series. However, the physical compatibility of ACE-jet should be tested before use with other products.

RESTRICTIONS:
- Keep away from children.
- Keep away from heat and open flame.
- Do not treat trees that are moisture stressed or suffering from herbicide damage.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

NOTICE OF WARRANTY:
ARBORJET, Inc. makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

STORAGE & DISPOSAL:
See attached leaflet for proper storage and disposal information.

*Not for use in California  **For Control of Specified Borers: Application to trees already heavily infested may not prevent the eventual loss of the trees due to existing pest damage and tree stress.

Use in Trees, Ornamentals, Forests, Seed Orchards and Tree Plantations against certain Coleopteran Pests including Cambial and Wood-Boring Insects

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
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<tbody>
<tr>
<td>Trees, Shrubs, Evergreens, Conifers, Christmas Tree Plantations, &amp; Palms*</td>
<td>Coleoptera: Buprestis Borers (including Bronze Birch Borer, and Emerald Ash Borer), Flatheaded Borers, Elm Leaf Beetle (larvae), Japanese Beetle, Leaf Beetles (larvae) (including elm and willow leaf beetles), Longhorned Borers (including Eucalyptus borer and Red Oak Borer), Root Weevil Adults (including Black Vine Weevil), White Pine Weevil</td>
</tr>
</tbody>
</table>

Use in Trees, Ornamentals, Forests, Seed Orchards and Tree Plantations against certain Lepidopterous larvae, Homopteran, Dipteran, Hemipteran, Hymenopteran and Thysanopteran Insects

<table>
<thead>
<tr>
<th>CROPS</th>
<th>PESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees, Shrubs, Evergreens, Conifers, Christmas Tree Plantations, &amp; Palms*</td>
<td>Lepidopterous larvae: Bagworm (Thyridopteryx ephemeraeformis), Browntail Moth, Budworms, Cankerworms (Spring and Fall), Carpenterworm (Prionoxystus robiniae), Casebearer, Clear Wing Borers (Parathene dohlii and P. tricincta), Cottonwood Twig Borer (Gypsonoma hambachiana), Eastern Oak Looper (Philagia tinea), Eastern Tent Caterpillar (Malacosoma americanum), Elm Sparrow (Ennomos subsignarius), Fall Cankerworm (Alsophila pometaria), Fall Webworm (Hyphantria cunea), Gypsy Moth (Lymantria dispar), Leafrollers, Linden Looper (Eriogaster liliaria), Nantucket Pine Tip Moth (larvae), Oakworms (Anisota senatoria, A. virginiensis, and A. stigma), Pine Cone Moth (Dioryctria spp.), Pine Needle Miners (including Ponderosa Pine), Pine Tip Moth (Rhavonia spp.), Poplar Tentmaker (Clostera inclusa), Spring Cankerworm (Palaearctica vernata), Forest Tent Caterpillar, Malacosoma disstria, Tussock Moth, Variable Oakleaf Caterpillar (Heterocampa marteo), Walnut Caterpillar (Datana integerrima), Winter Moth (Operophtera brumata), Whitemarked Tussock Moth (Hemeroncampa leucostigma), Yellownecked Caterpillar (Datana ministra), Zimmerman Pine Moths</td>
</tr>
</tbody>
</table>

Chewing Insects including Lepidopterous larvae: Bagworm (Thyridopteryx ephemeraeformis), Browntail Moth, Budworms, Cankerworms (Spring and Fall), Carpenterworm (Prionoxystus robiniae), Casebearer, Clear Wing Borers (Parathene dohlii and P. tricincta), Cottonwood Twig Borer (Gypsonoma hambachiana), Eastern Oak Looper (Philagia tinea), Eastern Tent Caterpillar (Malacosoma americanum), Elm Sparrow (Ennomos subsignarius), Fall Cankerworm (Alsophila pometaria), Fall Webworm (Hyphantria cunea), Gypsy Moth (Lymantria dispar), Leafrollers, Linden Looper (Eriogaster liliaria), Nantucket Pine Tip Moth (larvae), Oakworms (Anisota senatoria, A. virginiensis, and A. stigma), Pine Cone Moth (Dioryctria spp.), Pine Needle Miners (including Ponderosa Pine), Pine Tip Moth (Rhavonia spp.), Poplar Tentmaker (Clostera inclusa), Spring Cankerworm (Palaearctica vernata), Forest Tent Caterpillar, Malacosoma disstria, Tussock Moth, Variable Oakleaf Caterpillar (Heterocampa marteo), Walnut Caterpillar (Datana integerrima), Winter Moth (Operophtera brumata), Whitemarked Tussock Moth (Hemeroncampa leucostigma), Yellownecked Caterpillar (Datana ministra), Zimmerman Pine Moths |

Chewing and Mining Insects: Leafminers, Gall Midges, Sawflies (larvae), Birch Leafminer Piercing-Sucking Insects and Mites: Adelgids (including Hemlock Woolly Adelgid), Aphids, Leaffoppers, Mealybug Scale Insects, Whiteflies, Lacebugs, Plant Bugs (Lygus), Royal Palm Bugs, Boxelder Bug (Leptocoris trivittatus), Thrips, Spider Mites |
Micro-Injectable and Micro-Infusible Insecticide for use with the Arborjet Injection Systems in the Management of Specific Insect Pests of Trees and Landscape Ornamentals including Conifers, Christmas Tree and Deciduous Tree Farms, Seed Orchards and Plantations, and Forest Trees.

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