

# Mauget

## IMISOL®

SYSTEMIC INSECTICIDE/FUNGICIDE IN READY TO USE CAPSULES  
FOR TREE INJECTION USE FOR SEASONAL SUPPRESSION OF  
CERTAIN INSECTS AND DISEASES OF ORNAMENTAL TREES

MFG. BY: J.J. MAUGET CO.  
ADDRESS, TOWN, STATE: 129 Growth Center Dr. NE #A Floyd, VA 24091  
EPA REGISTRATION NO: 7946-21  
EPA ESTABLISHMENT NO: 7946-VA-1

### ACTIVE INGREDIENTS:

Debacarb	
[2-(2-ethoxyethoxy) ethyl-2-benzimidazole carbamate].....	1.70%
Carbendazim	
(Methyl 2-benzimidazole carbamate).....	0.30%
Imidacloprid	
1-[(6-Chloro-3-pyridinyl)methyl-N-nitro-2-imidazolidinimine].....	5.00%
<b>OTHER INGREDIENTS:</b> .....	<b>93.00%</b>
Total	100.00%

### Net Contents:

24 capsules plus 24 feeder tubes per carton  
 \_\_\_\_\_ 24 capsules @ 0.14 fl. oz. (4 mL) each, 3.25 fl. oz. (96 mL) net or  
 \_\_\_\_\_ 24 capsules @ 0.2 fl. oz. (6 mL) each, 4.9 fl. oz. (144 mL)

Shipping box: 12 cartons as above.

## KEEP OUT OF REACH OF CHILDREN CAUTION

	FIRST AID
<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 further treatment advice.</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 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> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<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>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-535-5053 for emergency treatment information.

### NOTE TO PHYSICIAN

There is no specific antidote available. Treat patient symptomatically.

Debacarb	GROUP	1	FUNGICIDE
Carbendazim	GROUP	1	FUNGICIDE
Imidacloprid	GROUP	4	INSECTICIDE

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# CAUTION

Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Causes eye irritation. Applicators must wear chemical resistant gloves made of any waterproof material. Wash thoroughly with soap and water after handling. Avoid breathing vapors. Remove contaminated clothing and wash before reuse.

### PERSONAL PROTECTIVE EQUIPMENT:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

### APPLICATORS AND OTHER HANDLERS MUST WEAR:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical resistant gloves, such as polyethylene or butyl rubber or neoprene rubber or viton
- Protective eyewear

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:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using 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.

## ENVIRONMENTAL HAZARDS

This pesticide is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

## 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, either directly or through drift. Only protected handlers may be in the area during application. For any requirement specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## Resistance-Management Recommendations

For resistance management, Imisol® contains two Group 1 fungicides. Any fungal/bacterial population may contain individuals naturally resistant to Imisol® and other Group 1 fungicides/bactericides. A gradual or total loss of pest control may occur over time if these fungicides/bactericides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

For resistance management, Imisol® contains a Group 4 insecticide. Any insect population may contain individuals naturally resistant to Imisol® and other Group 4 insecticides/acaricides. The resistant individuals may dominate the insect/mite population if this group of insecticides/acaricides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

## RESTRICTIONS

Do not inject trees that are less than two inches in diameter. This product is not to be used on trees which will produce food within the year following treatment. Use for tree micro-injection only as a post-bloom application. Do not apply prior to or during tree blooming.

## GENERAL DIRECTIONS

Make application when disease first appears. Repeat treatment if disease symptoms progress. Do not repeat within 3 months of first application. Some diseases may require repeated yearly application. IMISOL® insecticide/fungicide is for use on ornamental trees for the control of the following insects: Adelgids, Aphids, Black Vine Weevil Larvae, Bronze Birch Borer, Cottonwood Borer, Elm Leaf Beetle, Eucalyptus Longhorned Borer, Flatheaded Borer (including Alder and Birch Borer and Emerald Ash Borer), Japanese Beetle, Lacebugs, Leafhoppers, Leafminers, Mealybugs, Pine Tip Moth Larvae, Psyllids (including Lerp Psyllid), Royal Palm Bugs, Scale Insects (including Asian Cycad Scale), Thrips, Whiteflies, Douglas Fir Gall Midge, Douglas Fir Cone Moth Larvae, and the following diseases: Preventative Dutch Elm Disease treatments are made 4 weeks after Bark Beetle emerges. Therapeutic treatments are made as soon as possible after flagging branch is observed.

USE	DISEASE
Alder	Ceratocystis Canker, Fusarium Wilt, Physalospora (Bleeding Canker)
Arborvitae	Kabatina Branch Canker
Ash	Anthrachnose (Fall application only)
Bay Tree	Fusarium Wilt, Nectria Canker
Birch	Melanoconium Dieback
Buckthorn	Nectaria (Tubercularie) Canker
Camphor	Verticillium Wilt
Carob	Verticillium Wilt
Catalpa	Verticillium Wilt
Cedar	Cornyneum Blight, Diplodia Tip Blight, Phomopsis (Kabatina)
Cypress	Cedar Branch Canker
Douglas Fir	Phomopsis Canker
Elm	Cephalosporium ulmi (Elm Wilt), Ceratocystis ulmi (Dutch Elm Disease), Cytospora Canker, Fusarium Wilt, Vermicularia Dieback, Verticillium Wilt
Fir	Cytospora Canker
Gum (Sweet)	Ceratocystis Canker
Madrone	Thielaviopsis Decline, Fusarium Wilt
Magnolia	Ceratocystis Canker
Maple	Verticillium Wilt
Mimosa	Fusarium perniciosis (Mimosa Wilt)
Mulberry (Fruitless)	Ceratocystis Canker
Oak	Oak Wilt (Ceratocystis fagacearum), Anthracnose (Spring application only), Nectaria Canker, Oak Decline: (Botryodiplodia, Cephalosporium, Dothiorella, Fusarium, Pestalotia, Verticicladiella, Verticillium)
Olive	Fusarium Wilt, Verticillium Wilt
Palm	Penicillium vermoeseni (Pink Bud Rot), Atropellis Canker, Ceratocystis Dieback
Pine	Fusarium moniliforme, F. subglutinans (Pine Pitch Canker), Leptographium Canker
Pistachio (Non-Crop)	Verticillium Wilt
Poplar	Cytospora Canker
Redwood (Coast and Sierra)	Botryosphaeria Branch Canker, Corneum Canker
Spruce	Cytospora Canker
Sycamore	Anthrachnose (Spring application only)
Walnut (Black Non-Crop)	Melanconium Dieback, Ceratocystis Canker
Willow	Cytospora Canker

**Important:** Preventative application is more effective than therapeutic treatment in trees showing disease symptoms. Trees in advanced stages of disease development may not respond to treatment. Healthy trees under optimum conditions will absorb the full contents promptly. Infected trees will absorb the material more slowly due to the vascular plugging caused by the disease. If Imisol® is not absorbed within 24 hours, the tree is considered high risk and has a poor chance of survival.

#### **1. The MAUGET SYSTEM**

- (A) Mauget compressible capsule with insert hole
- (B) Feeder tube with flanged gun-sight and opposite tapered beveled end

#### **2. TOOLS**

- (A) Portable electric drill
- (B) 11/64 in. (0.4 cm) drill bit
- (C) Plastic mallet
- (D) Tape measure
- (E) Insertion tool (optional)

#### **3. NUMBER OF CAPSULES**

Measure the tree at chest height in inches. If measuring the circumference, divide this number by six (6) to determine the number of capsules needed. If measuring the diameter, divide this number by 2 (two) to determine the number of capsules needed. If the number of capsules results in a fraction, round down to the lower whole number.

The following dosage, per capsule, is generally recommended. Depending on tree diameter, use the following dosage, per capsule:

4 mL – 2 to 10 inches dbh (Diameter at Breast Height)

6 mL – 10 inches dbh and above (Diameter at Breast Height)

Trees in advanced stages of insect infestation and/or disease development, may not respond to treatment. The health, species of the tree and the environmental conditions will determine the rate of uptake.

#### **4. PRESSURIZING THE CAPSULES**

Apply the appropriate amount of pressure on the top of the capsule in order to compress.

#### **5. DRILLING THE TREE HOLE**

Predrill spaced injection sites at a slight downward angle at the root flair/buttress area (approximately 6.0 to 8.0 in., 15 to 20 cm) above ground level, using a clean 11/64 in. (0.4 cm) drill bit (except monocotyledons, conifers, etc.). Drill to a depth of 3/8 to 1/2 in. (0.95 to 1.3 cm) into healthy xylem tissue under the bark. For mini-micro feeder tube, see Step 10. Disinfect drill bit, insertion tool (if used) as well as mini-micro insertion tool prior to use on each tree.

#### **6. TREE HOLE DEPTH**

It is important that the feeder tube be set to the proper depth in the conductive xylem tissue. If set too deeply, flow is restricted by blockage in the heartwood; if set too shallow, leakage may occur. The feeder tube dispensing end is beveled to allow for a 1/4 in. plus tolerance.

#### **7. COMBINING CAPSULE AND FEEDER TUBE**

Several methods of combining the capsule with the feeder tube are acceptable including placing by hand, the feeder tube's flange end, with the flange notch upward, into the capsule insert hole of a compressed upright capsule. Push the flange end of the feeder tube flush with the membrane located at the inner end of the insert hole.

#### **8. PLACING THE FEEDER TUBE IN THE TREE**

Firmly seat the beveled, dispensing end of the feeder tube, with the attached upright capsule, into the predrilled tree injection hole. Tap the rear side, opposite the insert hole of the capsule with a mallet. This action will simultaneously seat the feeder tube in the injection hole while breaking the capsule membrane for releasing the capsule contents into the feeder tube and into the tree. Another method is to place the feeder tube in the predrilled hole of the tree using the optional insertion tool. Then place the compressed capsule onto the feeder tube in place.

#### **9. REMOVAL**

Uptake in the tree usually occurs within several minutes. Capsules may be temporarily rotated in place to see if any liquid is left. When empty, turn the capsules upside down for one minute before removal. Applicators must remove micro-injectors promptly after treatment. Empty capsules must not be left on the tree. The health and species of the tree, and local environmental conditions will determine the rate of uptake. If the capsule does not completely empty within a few hours, invert and carefully remove the capsule and enclose it in a heavy duty plastic bag for disposal in accordance with state and local regulations.

#### **10. MINI-MICRO FEEDER TUBE**

For established trees with thin bark (less than 3/8 in. thickness), use a 7/64 in. drill bit to produce a micro-injection site for a mini-micro feeder tube. Use of the Mini-Micro Insertion tool is recommended.

### **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a cool dry place out of the reach of children. Do not store below 45°F. Store capsules in an upright position in closed container. Keep out of direct sunlight when possible.

**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:** Dispose of empty capsules in a sanitary landfill or by incineration if approved by State and Local authorities.

### **NOTICE OF WARRANTY**

J.J. Mauget Co. makes no warranty of merchantability, fitness for any purpose or otherwise expressed or implied concerning this product or its uses which extends beyond the use of the product under normal conditions in accord with the statements made on this label.