

RESTRICTED USE PESTICIDE
Due to Reproductive Effects

For sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicators certification. Direct supervision for this product is defined as the certified applicator being physically present during application, mixing, loading, equipment repair, and equipment cleaning. Certified applicators must ensure that all persons involved in these activities under their direct supervision are informed of the precautionary statements.

HARPOON®

FOREST, ORNAMENTAL, NONCROP-BEARING AND CHRISTMAS TREE INSECTICIDE



Containing METASYSTOX-R® Insecticide For Effective Systemic Protection

ACTIVE INGREDIENT:
S-[2-(Ethylsulfanyl)ethyl] O,O-Dimethyl phosphorothioate 50%
INERT INGREDIENTS 50%
Total 100%

Contains aromatic petroleum distillate
Metasystox R is a Reg. TM of Miles Ag. Div.

KEEP OUT OF REACH OF CHILDREN DANGER

"PRECAUCIONAL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido explicado ampliamente"

STATEMENTS OF PRACTICAL TREATMENT
IF IN EYES: Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Call a physician.
IF INHALED: Remove victim to fresh air immediately. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available, by administering syrup of ipecac. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person.
IF ON SKIN: Remove contaminated clothing and immediately wash affected area with soap and water. Get medical attention. Wash clothing before reuse. If poisoning occurs, obtain medical aid immediately.

SEE ANTIDOTE AND OTHER PRECAUTIONARY STATEMENTS ON SIDE PANEL

NET WEIGHT: 0.1 oz. per injector (equiv. to 3 ml per injector)
EPA REG. NO. 64014-E EPA EST. NO. 54014-NY-1

TREE TECHNOLOGY SYSTEMS, INC.
1014 REIN ROAD - CHEEKTOWAGA, NY 14225 U.S.A.



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: Causes irreversible eye damage. May be fatal if inhaled, swallowed or absorbed through the skin. Do not get in eyes, on skin or on clothing. Do not breathe vapor. Wear goggles, safety glasses or face shield. Wear a mask or pesticide respirator jointly approved by the Mining Enforcement and Safety Administration and the National Institute for Occupational Safety and Health. Wash thoroughly with soap and water after handling and before eating or drinking or smoking. Remove contaminated clothing and wash before reuse. Do not contaminate feed or food.

SYMPTOMS OF POISONING

A sense of tightness in the chest. Sweating. Contracted pupils. Stomach pains, vomiting and diarrhea.

NOTE TO PHYSICIAN - ANTIDOTE

Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine. Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically.

PROTECTIVE CLOTHING, EQUIPMENT AND WORKER SAFETY STATEMENTS

REPEATED EXPOSURE TO CHOLINESTERASE INHIBITOR SUCH AS ARE CONTAINED IN THIS PRODUCT MAY, WITHOUT WARNING, CAUSE PROLONGED SUSCEPTIBILITY TO VERY SMALL DOSES OF ANY CHOLINESTERASE INHIBITOR.

Do not rub eyes or mouth with hands. If you feel sick in any way, STOP WORK, and get help right away. See FIRST AID (Practical treatment) section on this label. IF PRODUCT IS HANDLED INDOORS provide adequate mechanical exhaust ventilation.

HANDLE THE ARBOR® INJECTOR UNITS ONLY WHEN WEARING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT: Long sleeved shirt; long legged pants; chemical resistant shoes or boots; Wear chemical resistant gloves; Goggles, safety glasses or face shield. If used in areas of limited ventilation wear a pesticide respirator approved for use against organic vapors and approved by NIOSH under the provisions of 30 CFR Part 11

IMPORTANT! If pesticide comes in contact with skin, wash off with soap and water and contact a physician immediately. Before removing gloves wash them with soap and water. Always wash hands, face, and arms with soap and water before smoking, eating, drinking, or toileting.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not contaminate water when disposing of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS

FLAMMABLE - Keep away from heat or open flame.
(64-MFR50.PM4/06-08-92)

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CROP	II
Cedars	Bc
Cottonwoods	Az
Cypress	Bc Mi
Douglas Fr	Cc Er
Eims	Er
Junipers	Bc
Pines (Except Pinon)	Er Er
Redwood	Bc Bc
Spruce	Az
Walrus & Pecans (Non-bearing)	Az M

ACCEPTED
JUL 7 - 1992
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 64014-2

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DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. **IMPORTANT:** Read these entire Directions and Conditions of Sale before using HARPOON Insecticide.

PRECAUTIONARY REMINDERS

1. Protective eyewear (goggles, safety glasses or face shield) and chemical resistant gloves must be worn while handling or installing the injector units. See sections dealing with protective clothing.
2. When properly installed, the injector unit generates internal pressure resulting in the flow of HARPOON solution through the dispenser tube. The injector unit must never be activated unless installed correctly and securely in the tree to be treated.
3. Injector units containing HARPOON may require up to several minutes or more to empty depending on the health of the treated tree and local weather conditions. Never assume that injector units have depressurized completely because they appear nearly empty or empty. When removing injector units, individuals must wear eye protection and chemical resistant gloves. The individual should then cover the injector unit with one hand near the point of the insertion into the stem while grasping the barrel end of the injector unit with the other hand. The injector unit should be turned slightly as it is slowly withdrawn from the tree.
4. Discard used injector units according to **INJECTOR (CONTAINER) DISPOSAL** in **STORAGE AND DISPOSAL** statement.

USE RESTRICTIONS

- Do not inject trees that are less than two inches in diameter.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.
- Do not treat trees that are suffering from stress such as lack of moisture or herbicide damage.
- Do not use on trees which will produce food within the year following treatment (i.e. maple syrup)

SITES, PESTS AND APPLICATION TIMING

CROP	INSECT/PEST	REMARKS
Cedars	Bark Beetles	Treat anytime from early spring thru October. Repeat after new invasion.
Cottonwoods	Aphids	Apply when wingless forms appear.
Cypress	Bark Beetles Mites	Treat anytime from early spring thru October. Repeat after new invasion. Apply after mite egg hatch.
Douglas Fr	Cane Moths Engraver Beetles	Apply to heavy, current cone crop trees during or shortly after eggs are laid. Treat anytime from early spring thru October. Repeat after new invasion.
Elms	Elm Leafbeetles	Apply after eggs are present or during early larval stage.
Juniipers	Bark Beetles	Treat anytime from early spring thru October. Repeat after new invasion.
Pines (Except Pinion)	Engraver Beetles (5 species) Engraver Beetles (Moneray) Flathead Borer Mountain Pine Beetle Red Turpentine Beetle Black Turpentine Beetle Western Pine Beetle Jeffrey Needle Miner Mites Nursery Pine Tip Moth Pine Needle Aphid Pine Needle Scale	April to June. Apply after mite egg hatch. Treat when larval damage first appears. Apply when wingless forms appear. Apply when crawlers appear.
Redwood	Bark Beetles Mites Needle Scale	When active infestation sites are present. Apply after mite egg hatch.
Spruce	Adelgids	Apply when crawlers appear.
Walnuts & Pecans (Non-bearing)	Aphids Mites	Apply in May - June. Apply when wingless forms appear. Apply after mite egg hatch.



INSTALLING INJECTOR UNITS

1. Determine the number of injector units to be installed based on: a) the target insect pest(s); b) stem circumference at breast height, and c) the registered dosage rate as administered by proper spacing of injector units around the stem circumference. Unless otherwise noted, injector units should be installed in the lower stem and root flares near the ground line, i.e. 6 to 8 inches (15 to 20 cm) from the soil surface.
2. Using a portable electric drill with a sharp, clean 11/64 inch (0.4 cm) bit, the installer should drill a hole at the correct stem circumference spacing to a depth of 1/4 to 1/2 inch (0.6 to 1.3 cm) into the wood (xylem) under the bark. A slight downwardly drilling angle is recommended for more complete drainage of the injector unit.
3. After reaching the proper depth range, the drill bit should be withdrawn carefully to avoid dislodging bark fragments around the exterior opening of the hole. The rear barrel portion of the injector unit should be compressed partially and the injector unit should be inserted into the hole. Placing the plastic installation cap over the rear barrel end, strike the cap with a plastic hammer to seat the injector unit firmly in the hole. If the injector unit is not properly positioned in the hole, strike the cap again until correctly seated. By striking the injector unit, the back of the feeder tip is forced back into the funnel-shaped section dislodging a septum which allows the HARPOON solution to flow from the injector unit into the tree. When the injector unit is positioned correctly in the tree and the internal septum is dislodged to permit the flow of HARPOON remove the cap and, if necessary, push the rear barrel portion of the unit further downwardly until it is flush with the edge of the locking mechanism. This engages the locking mechanism which pressurizes the injector unit and assists in the evacuation of HARPOON from the injector unit and movement into the vascular system of the tree.
4. Each hole should be drilled and an injector unit installed without undue delay. After the injector is properly seated, it should be activated. This sequence minimizes the flow of tree sap or resin into the hole prior to injection.
5. Disinfect the drill bit between the injection of each tree with a mixture of 1 part household bleach to 4 parts water.

RECOMMENDED APPLICATIONS

Install one (1) ARBORx Injector Unit containing HARPOON® Insecticide for every 6 inches of stem (tree trunk) circumference.

CONDITIONS OF SALE: The directions on this label were determined through research to be the directions for correct use of this product. This product has been tested for a range of weather conditions similar to those weather conditions that are ordinary and customary in the geographic areas where the product is used. Insufficient control of pest and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather, or from failure to follow label directions. In addition, failure to follow label directions may cause injury to other crops, animals, men, or the environment. Tree Technology Systems, Inc. offers and the buyer accepts and uses this product subject to the conditions that extraordinary or unusual weather, or failure to follow label directions are beyond the control of Tree Technology Systems Inc. and are, therefore the responsibility of the buyer.

STORAGE AND DISPOSAL

STORAGE: Do not contaminate water, food or feed by storage or disposal. Do not reuse empty container. Do not store in the home, car or office. Store injectors in a locked, cool, dry, storage area out of reach of children. Do not expose to temperatures below 32° F.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, or insect is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

INJECTOR (CONTAINER) DISPOSAL: Do not reuse injectors. Used injectors should be placed in the heavy-duty plastic bag which accompanies each case of injector units. The bag must be properly sealed, placed into the original shipping carton and returned freight prepaid for disposal to Tree Technology Systems, Inc. 1014 Rain Road Cheektowaga, NY. 14225.

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