

# Hachi-Hachi®

## Insecticide

Emulsifiable Concentrate



**SPECIMEN**

**GROUP 21A INSECTICIDE**

For indoor greenhouse use on ornamental plants.

### Active Ingredient

Tolfenpyrad: (4-chloro-3-ethyl-1-methyl-N-[4-(p-tolyloxy)benzyl]pyrazole-5-carboxamide) .....	15.0%
Other Ingredients .....	85.0%
<b>TOTAL</b> .....	<b>100.0%</b>

Contains 1.25 lbs active ingredient per U.S. gallon

## Keep Out of Reach of Children WARNING / AVISO

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.)

Refer to label booklet for additional precautionary information and directions for use, including First Aid and storage and disposal.

**NOTICE:** Read the entire label before using. Use only according to label directions. Before buying or using this product, read *Terms and Conditions of Use, Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies* inside label booklet.

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FPL 20120228

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## WARNING / AVISO

May be fatal if swallowed. Causes skin irritation. Causes substantial but temporary eye injury. Wear protective eyewear. Harmful if absorbed through skin. Harmful if inhaled. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Do not get in eyes, skin or clothing.

### FIRST AID

<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 the poison control center or doctor.</li><li>• Do not give anything by mouth to an unconscious person.</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. 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 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 by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor 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. In case of emergency endangering health or the environment involving this product, call **INFOTRAC at 1-800-535-5053**.

**NOTE TO PHYSICIAN:** There is no specific antidote. All treatment should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred.

## PERSONAL PROTECTIVE EQUIPMENT

### Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves made of material such as barrier laminate or Viton;
- Chemical resistant footwear plus socks;
- Protective eyewear (goggles, face-shield or safety glasses).

If you want more options for chemical-resistant materials, follow the instructions for Category F or G on an EPA chemical-resistance category selection chart.

## 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.

Discard clothing and personal protective equipment that cannot be reused, including clothing and other absorbent materials that have been drenched or thoroughly contaminated with this product's concentrate. Otherwise, wash clothing and personal protective equipment (including both the inside and outside of gloves) before each day of reuse according to manufacturer's directions or, if no such directions, in detergent and hot water. Keep and wash PPE separately from other laundry.

## 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 requirements specific to your State or Tribe, consult the agency in your state responsible for pesticide regulation.

## 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 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 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard is:

- Coveralls worn over short-sleeved shirt and short pants;
- Chemical-resistant gloves made of material such as barrier laminate or Viton;
- Chemical resistant footwear plus socks; and
- Protective eyewear (goggles, face-shield or safety glasses).

## NONAGRICULTURAL 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, or greenhouses.

Keep people out of treated areas without protective clothing until sprays have dried.

## GENERAL INFORMATION

Hachi-Hachi® insecticide is an emulsifiable concentrate containing 1.25 lbs of active ingredient per gallon. This product is a contact insecticide used for the control of various insects. Hachi-Hachi insecticide should be used in a program with other products to provide season long protection. Apply as a spray as directed in the Application Directions section of this label.

### Resistance Management

Hachi-Hachi insecticide contains tolfenpyrad which is classified by IRAC in Group 21A-mitochondrial electron transport inhibitors. Repeated use of the same chemistry has been shown to result in the buildup of resistant strains of insects. Rotate the use of Hachi-Hachi insecticide with alternate mode of action insecticides.

Resistance management strategies recommend that you DO NOT apply rates lower than recommended on the label. For best results, do not make more applications of Hachi-Hachi insecticide than permitted on the label in a single crop cycle. Contact your local extension specialist or certified crop advisor for additional resistance management or IPM recommendations. Also, for more information about Insect Resistant Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at <http://www.irac-online.org>.

### Mixing Directions

Shake well before using. Read and follow all label directions for each tank mix product prior to any tank mixing with Hachi-Hachi insecticide. This product can be mixed with other registered pesticides. The most restrictive use directions and precautions must be followed.

- **Hachi-Hachi Insecticide Alone:** Begin with clean equipment. Fill spray tank with  $\frac{3}{4}$  of the amount of water needed for the intended application and then turn on agitation. Pour recommended amount of product on the surface of water in the spray tank. Add the balance of the water to the spray tank with agitation running. Keep agitation running during filling and spraying operations. If spraying must be stopped before emptying the sprayer, resume agitation before spraying the remainder of the load.
- **Hachi-Hachi Insecticide Tank Mixtures:** Follow all use directions as listed above under *Hachi-Hachi Insecticide Alone* with the following exception: after the Hachi-Hachi insecticide is thoroughly mixed and the tank is  $\frac{3}{4}$  full, add the recommended amount of wettable powder, soluble powder, flowable, emulsifiable concentrate, or soluble liquid product, while maintaining agitation. Then continue adding water to the tank to achieve the desired level, while maintaining agitation.
- **Hachi-Hachi Insecticide Tank Mixtures with Products in Water-Soluble Packaging:** Follow all use directions as listed above under *Hachi-Hachi Insecticide Alone* with the following exception: add the desired number of water-soluble bags to the tank (if allowed by their label instructions) at the same time the Hachi-Hachi insecticide is added. **Note:** If using products in water soluble packaging, do not tank mix with products that contain boron, chromium, or other micronutrients.

Hachi-Hachi insecticide is physically and biologically compatible with many registered pesticides, fertilizers or micronutrients. Contact your supplier for advice when considering mixing Hachi-Hachi insecticide with other pesticides, fertilizers or micronutrients. If you have no experience with the combination you are considering, you should conduct a test to determine physical compatibility. To determine physical compatibility, add the recommended proportions of each chemical with the same proportion of water, as will be present in the chemical supply tank, into a suitable container, mix thoroughly and allow to stand for five (5) minutes. If the combination remains mixed, or can be readily re-mixed, the mixture is considered physically compatible.

### Application Directions

## GENERAL USE LIMITATIONS AND PRECAUTIONS

### Indoor Greenhouse Use on Ornamental Crops

- Do not apply to *Salvia* spp., *Impatiens* spp., *Gypsophila* spp. and New Guinea impatiens due to potential crop injury.
- Do not apply to Poinsettias with bracts in color.
- In Florida, do not use on bearing or nonbearing commercial fruit trees and vines.
- Do not apply this product through any type of irrigation system.
- Do not apply this product as a smoke or aerosol.
- Do not apply this product to plants used for food or animal feed.
- Do not apply to fruit trees and vines that will bear harvestable fruit within 12 months.

## Indoor Greenhouse Use on Ornamental Crops

Hachi-Hachi insecticide is recommended for use on indoor greenhouse use on several ornamental plants. The use directions of this product are based on the results of product testing programs on a wide variety of ornamental plants. However, it is impossible to test this product on all species and cultivars. The phytotoxicity of Hachi-Hachi insecticide has been assessed on a wide variety of common ornamental plants with no phytotoxic effects. However, not all plant species and their varieties and cultivars have been tested with possible tank mix combinations, sequential pesticide treatments, and adjuvants and surfactants. Local conditions also can influence crop tolerance and may not match those under which testing has been conducted. Therefore, before using Hachi-Hachi insecticide, test the product on a sample of the crop to be treated to ensure that a phytotoxic response will not occur as a result of applications.

Hachi-Hachi insecticide works primarily through contact action, so good spray coverage is necessary for control of listed insects on the label. Applications should be made immediately after the spray solution is prepared. Under severe insect pressure, use the maximum rates and the shorter spray interval as specified on the label. Dense foliage or excessive growth will often prevent adequate coverage; adjust spray volumes accordingly. Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Treat plants when pests are immature or at a susceptible stage and populations are building, before crop damage occurs.

Applications may be made with high or low volume spray equipment that provides thorough coverage of the plant. Apply with properly calibrated spray equipment. A wetting agent or other spray adjuvant, approved for use on the crop, may be added to spray solutions according to the manufacturer's use instructions to achieve optimum control.

Hachi-Hachi has been tested on a wide variety of common finished greenhouse crops (listed below). For greenhouse crops not listed below and all young herbaceous crops, such as bedding plant plugs, the user should test the tolerance of Hachi-Hachi on a small area under their local conditions and observe treated crops for 4 to 7 days prior to broad scale use. Hachi-Hachi insecticide is recommended for use on ornamental plantings listed in Table 1.

Common Name	Scientific Name
Arrowwood	<i>Viburnum</i> spp.
Ash	<i>Fraxinus</i> spp.
Cherry	<i>Prunus</i> spp.
Chrysanthemum	<i>Chrysanthemum</i> spp.
Coleus	<i>Solenostemon</i> spp.
Evening Primrose	<i>Oenothera</i> spp.
Gerbera (Transvaal Daisy)	<i>Gerbera</i> spp.
Gladiolus	<i>Gladiolus</i> spp.
Lantana (Yellow Sage)	<i>Lantana camera</i>
Marigold	<i>Tagetes</i> spp.
Moss Rose	<i>Portulaca</i> spp.
Petunia <sup>2</sup>	<i>Petunia</i> spp.
Poinsettia <sup>3</sup>	<i>Euphorbia pulcherrima</i>
Schefflera	<i>Brassaia actinophylla</i>
Yew	<i>Taxus media</i>

<sup>1</sup> Local conditions can influence crop tolerance and may not match those under which these species were tested. Before using Hachi-Hachi insecticide, test the product on a small sample of the crop to be treated.

<sup>2</sup> Direct sprays of Hachi-Hachi to blooms of some species of Petunia at higher use rates may cause phytotoxicity to existing blooms.

<sup>3</sup> Do not apply to Poinsettias with bracts in color.

Temporary phytotoxicity may occur to some species of *Ageratum*, *Colocasia*, *Geranium*, *Lobelia*, Pansy (flowers) *Verbena*, and *Vinca*. Users should test the tolerance of Hachi-Hachi under their local conditions and observe these crops for 4 to 7 days prior to broad scale use.

**Do not apply Hachi-Hachi to *Salvia* spp., *Impatiens* spp., *Gypsophila* spp. and New Guinea Impatiens due to potential crop injury.**

**TABLE 2**  
**Application Rate Chart For Hachi-Hachi Insecticide**

Use	Pest Controlled	Dilution Rate Fl. Oz./100 Gallons	Use Directions
Greenhouse ornamental plants EXCEPT cut flowers	<ul style="list-style-type: none"> <li>• Aphids</li> <li>• Leafhoppers</li> <li>• Lepidopteran insects (early instars)</li> <li>• Scale</li> <li>• Mealybug</li> <li>• Thrips</li> </ul> <p>Suppresses:</p> <ul style="list-style-type: none"> <li>• Whitefly</li> <li>• Powdery mildew</li> </ul>	21 - 32	<ul style="list-style-type: none"> <li>• The maximum single application rate is 1.36 lb a.i./acre (139 fl oz/A) or 0.31 lb a.i./10,000 square feet.</li> <li>• Apply no more than 100 gallons of spray solution per 10,000 square feet per application.</li> <li>• 100 gallons of finished spray solution will typically cover 20,000 square feet of greenhouse.</li> <li>• Apply no more than 2 applications per crop cycle.</li> <li>• Do not apply more than 4 applications per year.</li> <li>• Apply no more than 64 fl. oz. per 10,000 square feet per crop cycle.</li> <li>• Allow at least 10 days between applications.</li> <li>• Apply in sufficient water to obtain complete coverage of all plant parts. Applications may be made with high volume or low volume ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.</li> </ul>
Greenhouse ornamental plants grown for cuttings (e.g. cut flowers)		14 - 22	<ul style="list-style-type: none"> <li>• The maximum single application rate is 0.94 lb a.i./acre (96 fl oz/A) or 0.22 lb a.i. per 10,000 square feet.</li> <li>• Apply no more than 100 gallons of spray solution per 10,000 square feet per application.</li> <li>• 100 gallons of finished spray solution will typically cover 20,000 square feet.</li> <li>• Apply no more than 2 applications per crop cycle.</li> <li>• Do not apply more than 4 applications per year.</li> <li>• Do not apply more than 44 fl. oz. per crop cycle per 10,000 square feet.</li> <li>• Allow at least 10 days between applications.</li> <li>• Apply in sufficient water to obtain complete coverage of all plant parts. Applications may be made with high volume or low volume ground equipment only. Follow the spray equipment manufacturer's directions to determine the amount of spray solution required to obtain thorough coverage. Consult the spray equipment manufacturer's operator's manual, spray nozzle catalogs and/or your crop advisor for more information.</li> </ul>

## STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in a cool, dry place.

**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:** Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer container for recycling, if available, offer for reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## TERMS AND CONDITIONS OF USE

If terms of the following *Warranty Disclaimer*, *Inherent Risks of Use* and *Limitation of Remedies* are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, to the extent consistent with applicable law, use by the buyer or any other user constitutes acceptance of the terms under *Warranty Disclaimer*, *Inherent Risks of Use*, and *Limitation of Remedies*.

## WARRANTY DISCLAIMER

SePRO Corporation warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SEPRO CORPORATION MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

## INHERENT RISKS OF USE

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of SePRO Corporation or the seller. To the extent consistent with applicable law, all such risks shall be assumed by buyer.

## LIMITATION OF REMEDIES

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories) shall be limited to, at SePRO Corporation's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used.

To the extent consistent with applicable law, SePRO Corporation shall not be liable for losses or damages resulting from handling or use of this product unless SePRO Corporation is promptly notified of such losses or damages in writing. In no case shall SePRO Corporation be liable for consequential or incidental damages or losses.

The terms of the *Warranty Disclaimer*, *Inherent Risks of Use* and this *Limitation of Remedies* cannot be varied by any written or verbal statements or agreements. No employee or sales agent of SePRO Corporation or the seller is authorized to vary or exceed the terms of the *Warranty Disclaimer* or this *Limitation of Remedies* in any manner.

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