

Hachi-Hachi[®] SC

Insecticide

SPECIMEN



GROUP 21A INSECTICIDE

For indoor greenhouse use on ornamental plants.

ACTIVE INGREDIENT:

Tolfenpyrad

1H-Pyrazole-5-carboxamide, 4-chloro-3-ethyl-1-methyl-N-[[4-(4-methylphenoxy)phenyl]methyl]- 15.0%

OTHER INGREDIENTS: 85.0%

TOTAL 100.0%

Contains 1.31 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. If terms are unacceptable, return at once unopened.

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Manufactured for: **SePRO Corporation**
11550 N. Meridian Street, Suite 600, Carmel, IN 46032 U.S.A.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children

WARNING / AVISO

May be fatal if inhaled. Do not breathe vapor or spray mist. Harmful if swallowed or if absorbed through skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

FIRST AID	
If inhaled	<ul style="list-style-type: none"> • 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 treatment advice.
If swallowed	<ul style="list-style-type: none"> • 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 to an unconscious person.
If in eyes	<ul style="list-style-type: none"> • 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. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice.

HOTLINE NUMBER

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**.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves;
- Shoes plus socks;
- Protective eyewear (goggles, face shield or safety glasses).
- For handling activities, use dust/mist filtering respirator with an organic vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P, or HE prefilter.

Follow the 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 RECOMMENDATIONS

Users should:

- Wash thoroughly with soap and water after handling and 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.
- 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.

ENGINEERING CONTROLS STATEMENT

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS

This pesticide is very highly toxic to fish and aquatic invertebrates.

For terrestrial uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

This product is highly toxic to bees and other pollinating insects exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are visiting the treatment area. Application must be made at least 8 hours prior to bees foraging.

This product may impact surface water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having medium to high potential for reaching both surface water and aquatic sediment via runoff for several weeks after application. A level, well-maintained vegetative filter (buffer) strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of this chemical from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's potential to reach aquatic sediment via runoff.

ENDANGERED SPECIES RESTRICTIONS

This product may pose a hazard to endangered aquatic species. Follow all use directions.

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 and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants;
- Chemical-resistant gloves;
- Chemical-resistant footwear plus socks;
- 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, nurseries, and greenhouses.

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

USE INFORMATION

Hachi-Hachi® SC insecticide is a suspension concentrate containing 1.31 lbs of active ingredient tolfenpyrad per gallon. This product is a contact insecticide used for the control of several orders of insects. Complete and thorough spray coverage is necessary for maximum results.

Hachi-Hachi SC 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.

Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. Adjust water volumes and tractor speed accordingly for crops with dense foliage or excessive growth. Unless otherwise specified under Application Directions, apply when pest populations are beginning to build, before crop damage or injury is observed. Consult your local agricultural advisor or state cooperative extension service for recommendations.

DIRECTIONS FOR USE OF HACHI-HACHI® SC INSECTICIDE AS A FUNGICIDE

For crops and diseases where the level of activity of Hachi-Hachi® SC insecticide is listed as "control", this product may be used alone as a contact fungicide or mixed with other registered fungicide products to broaden spectrum of disease control. For crops and diseases where the level of activity of Hachi-Hachi® SC insecticide is listed as "suppression", this product should NOT be substituted for labeled fungicidal products.

Application Directions

- Applications should be made immediately after the spray solution is prepared.
- Thorough spray coverage is critical to obtain control of the target pest(s).
- Applications may be made by ground with high or low volume spray equipment that provides thorough spray coverage of the plant.
- For ground applications, use coarse droplet size.
- Use sufficient water volume to ensure thorough coverage of foliage.
- Do not apply Hachi-Hachi SC insecticide through any type of irrigation system
- **RESTRICTION:** Not for sale or use in the state of New York.

SPRAY ADJUVANTS

For maximum performance, the use of an agricultural spray adjuvant with Hachi-Hachi® SC insecticide is recommended to increase spray coverage of the plants and pests being treated. Select an adjuvant that is labeled for agricultural use and follow its use directions.

CROP ROTATION RESTRICTIONS

CROP/CROP GROUP	PLANTBACK TIMING
All crops on this label	0 days following application
All other crops	14 days following application

USE LIMITATIONS AND PRECAUTIONS FOR GREENHOUSE ORNAMENTAL CROPS

- Do not apply this product as a smoke or aerosol.
- 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 with color.
- In Florida, do not use on bearing or nonbearing commercial fruit trees and vines.
- Do not use this product through any type of irrigation system.

Resistance Management

Hachi-Hachi® SC insecticide contains the active ingredient tolfenpyrad, an IRAC Group 21A insecticide. Use of the same mode of action repeatedly in the same field or area may result in reduced control and/or insect resistance. Unless targeting a single generation of a pest, Hachi-Hachi® SC insecticide applications should be alternated with other insecticidal modes of action. If targeting a single generation of a pest, do not apply more than two consecutive applications of Hachi-Hachi® SC insecticide before rotating to an insecticide with a different mode of action.

Resistance management strategies recommend that you DO NOT apply rates lower than recommended on the label. Contact your local extension specialist or certified crop adviser for additional Insecticide Resistance Management (IRM) or IPM recommendations. For more information about IRM, visit the Insecticide Resistance Action Committee (IRAC) website 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® SC insecticide. This product can be mixed with other registered pesticides for use on labeled crops or sites, in accordance with the most restrictive use directions and precautions. No labeled dose rate should be exceeded. Hachi-Hachi® SC insecticide is physically and biologically compatible with many registered pesticides, fertilizers or micronutrients. Contact your supplier for advice when considering mixing Hachi-Hachi® SC 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 minutes. If the combination remains mixed, or can be readily remixed, the mixture is considered physically compatible.

- **Hachi-Hachi® SC Insecticide Alone:** Begin with clean equipment. Fill spray tank with ¾ 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 remaining water volume 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® SC Insecticide Tank Mixtures:** Begin with clean equipment. Fill spray tank with ¾ of the amount of water needed for the intended application and turn on agitation.

If using a buffering agent, add after filling the tank with ¾ amount of water.

Add the recommended amount of tankmix products in the following order while maintaining agitation:

- 1) products in water soluble packets
- 2) wettable powders
- 3) water dispersible granulars and/or soluble powders
- 4) flowable liquids (including Hachi-Hachi® SC insecticide)
- 5) emulsifiable concentrate
- 6) adjuvants and/or oils
- 7) remaining amount of water to achieve the desired level

COMPATIBILITY STATEMENT REGARDING CERTAIN FUNGICIDE PRODUCTS

Hachi-Hachi® SC insecticide has been found to be compatible in mixes with several different fungicide products and has been found to be safe to labeled crops under most conditions. However, care should be taken when applying Hachi-Hachi® SC insecticide in tankmixes with fungicide products in FRAC Group 3 (sterol biosynthesis inhibitors) and FRAC Group 11 (QoI) if environmental conditions are known to be conducive to adverse crop response to those products.

Indoor Greenhouse Use on Ornamental Crops

ORNAMENTAL PLANTS: Hachi-Hachi® SC insecticide is recommended for use on ornamental plants. The use directions of this product are based on the results of product testing programs on a wide variety of ornamental plants. The phytotoxicity of Hachi-Hachi® SC insecticide has been assessed on a wide variety of common ornamental plants. However, not all plant species, varieties, and cultivars have been tested, including with possible tankmix 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® SC insecticide for commercial applications, the user must test the product and its representative use 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® SC 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.

Though Hachi-Hachi® SC insecticide has been tested on a wide variety of common finished greenhouse crops (see Table 1), crop injury is always possible due to the varying environmental conditions under which this product may be applied. Young herbaceous crops such as bedding plant plugs may be more susceptible than mature plants. The user MUST test Hachi-Hachi® SC insecticide on a small area under local conditions and with the representative use (e.g. plant size, tank mixes, with fungicides, etc.) prior to any commercial application. If any sign of crop damage or phytotoxicity occurs during the small-scale test, do not make commercial applications of Hachi-Hachi® SC to that crop. To the extent consistent with applicable law, the user or buyer assumes all risks and liability associated with applying Hachi-Hachi® SC if commercial applications are made without first evaluating the representative use on the crop at a small scale on any species. The user or buyer assumes all risks and liability associated with applying Hachi-Hachi® SC to any crop not listed in Table 1 (List of Plant Species Tested for Sensitivity to Hachi-Hachi® SC Insecticide).

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.
Fanflower	<i>Scaevola aemula</i>
Gerbera (Transvaal Daisy)	<i>Gerbera</i> spp.
Lantana	<i>Lantana</i> spp.
Madwort	<i>Alyssum</i> spp.
Moss Rose	<i>Portulaca</i> spp.
Pentas	<i>Pentas lanceolata</i>
Schefflera	<i>Brassaia actinophylla</i>
Snapdragon	<i>Antirrhinum majus</i>
Yew	<i>Taxus media</i>
Zinnia	<i>Zinnia</i> sp.

¹ Local conditions can influence crop tolerance and may not match those under which these species were tested. Before using Hachi-Hachi® SC insecticide for commercial applications, test the product on a small sample of the crop to be treated with a representative crop to ensure crop injury does not occur.

Temporary phytotoxicity may occur to some species of *Ageratum*, *Begonia*, *Colocasia*, *Geranium*, *Ground Orchid (Spathoglottis plicata)*, *Lobelia*, *Marigold (Tagetes spp.)*, Pansy (flowers), *Verbena*, and *Vinca*.

DO NOT APPLY HACHI-HACHI SC INSECTICIDE TO SALVIA SPP., IMPATIENS SPP., GYPSOPHILA SPP., AND NEW GUINEA IMPATIENS DUE TO POTENTIAL CROP INJURY.

Use	Pest	Dilution Rate Fl. Oz./100 Gallons	Use Directions
Greenhouse ornamental plants EXCEPT cut flowers	<ul style="list-style-type: none"> • Aphids • Leafhoppers • Lepidopteran insects (early instars) • Mealybugs • Scale • Thrips • Whitefly* • Powdery mildew* 	21 to 32 fl oz per 100 gal	<ul style="list-style-type: none"> • Do not apply more than 32 fl oz/100 gal (1.36 lbs a.i./acre) per application. • Do not apply more than 100 gallons of spray solution per 10,000 square feet per application. • 100 gallons of finished spray solution will typically cover 20,000 square feet of greenhouse. • Do not apply more than 2 applications per crop cycle. • Do not apply more than 64 fl oz/100 gal (2.72 lbs a.i./acre) per crop cycle. • Allow at least 10 days between applications. • Preharvest interval (PHI): 0 days • 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. Spray to the point of runoff. 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.

(continued)

