11/23/2005 499-506 18 - / Ś EPA Reg. Number: Date of Issuance U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Peslicide Programs 499-506 Registration Division (H7505C) November 23, 2005 401 M St., S.W. Washington, D.C. 20460 Term of Issuance: Conditional NOTICE OF PESTICIDE Name of Pesticide Product: Registration TC 245 (under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

# Whitmire Micro-Gen Research Laboratories 3568 Tree Court Industrial Blvd.

### St. Louis, MO 63122-6682

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) and (B) provided that you:

- 1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- 2. Make the following label changes:
  - a. Revise the EPA Registration Number to read, "EPA reg. No. 499-506.
  - b. On page 2 of the container back panel, revise the text under the subheading "HAZARDS TO HUMANS AND DOMESTIC ANIMALS" to read as follows:
    - "Caution: Harmful if swallowed or inhaled. Avoid breathing spray mist. Causes eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals."
  - c. On page 2 of the container back panel, replicate the following Physical and Chemical Hazards:

#### "PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame."

d. On page 2 of the container back panel, insert the following Personal protective equipment (PPE) language:

"PERSONAL PROTECTIVE EQUIPMENT (PPE): Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart. Applicators and other handlers who may be exposed to the dilute and/or concentrate through application or other tasks must wear: Long-sleeved shirt and long pants; Chemical-resistant gloves, such as, Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; Shoes plus socks; Protective Eyewear. Chemical-resistant headgear if overhead exposure. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions

Signature of Approving Official:

EPA Form 8570-6

10.90

Date:

for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. When handlers use 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."

- e. On page 3 of the container back panel, revise the storage and disposal Pesticide Disposal statement as follows:
  - "PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site in accordance with the label directions or at an approved waste disposal facility."
- f. On page 5 labeled as "FULL LABEL" revise the Hazards to Humans and Domestic Animals text as follows:
  - "CAUTION: Harmful if swallowed or inhaled. Avoid breathing spray mist. Causes eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals."
- g. On page 5 revise the Personal Protective equipment section to include the following statement: "Chemical-resistant headgear if overhead exposure." See PPE language identified in section d above.
- h. Revise the ENVIRONMENTAL HAZARDS section, as follows:

#### **"ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to fish. Do not contaminate bodies of water when disposing of equipment rinsate or washwaters.

**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. Drift from treated areas may be hazardous to organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters."

WIDE AREA COMMUNITY APPLICATIONS BY GROUND OR AERIAL EQUIPMENT, (Ultra Low Volume (ULV) sprays or fogs.): Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish. Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist. Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries) except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body.

- i. Within the Directions for Use, remove all instances of the statement "(but not limited to)." This is considered an open ended use site, and therefore creates potential misuse of the product.
- j. On Page 9 of the Full Label, revise the following statement:

"IMPORTANT NOTE: Plant safety is an important consideration when using insecticides in a greenhouse. However, it is not possible to evaluate the phytotoxicity of TC 245 towards numerous plant varieties that may react differently to insecticides in different growth stages or under varying environmental conditions. Before making widespread applications of TC 245, treat a limited number of plants and observe for phytotoxicity over a 10 day period." To revise the header as follows: "IMPORTANT PHYTOXICITY INFORMATION:"

- k. On page 10 of 14, revise the statement "deodorized base oil" within the Stored Products Section to "Food Grade Oil"
- 1. On Page 12 of 14 (FULL LABEL) revise the following statement:

C

Signature of Approving Official:					
	See	pag	¢		

EPA Form 8570-6

Date:

7 18

"Where oil residues are not undesirable, this product can be diluted at the rate of 1 part to 29 parts up to 1 part to 11 parts in deodorized base oil instead of water and applied as a space spray with any good type applicator such as mechanical or ULV fogger capable of producing particles of aerosol size." To"

"This product can be diluted at the rate of 1 part to 29 parts up to 1 part to 11 parts in food grade base oil instead of water and applied as a space spray with any good type applicator such as mechanical or ULV fogger capable of producing particles of aerosol size."

- m. On Page 12 of 14 (FULL LABEL) Remove USDA from the header "FOR USDA INSPECTED FACILITIES:"
- n. On page 13 of 14 (FULL LABEL) Modify the language for Household ULV application to the following statement "ULV APPLICATION: To control adult mosquitoes, use hand held cold aerosol ULV sprayers or hand held thermal fogging devices. Dilute product 1 part to 23 parts oil to 1 part product to 59 parts oil. Use 1 ounce of diluted product per 100 square feet." To treat vegetation in water from land, allow the wind to move product into the vegetation. Do not spray directly over or into the water <sup>a</sup>
- On page 13 of 14 (FULL LABEL), remove the Precautionary Statements Section, all associated subtitles and associated language. This is currently present on the front section of the FULL LABEL.
- p. On page 14 of 14 (FULL LABEL) Remove the Storage and Disposal statement. This is currently present as modified in the discussion for in section e above.
- q. The use rates for the Wide Area Mosquito abatement are listed in lbs./acre, therefore you must list on the front panel of the container label the specific weight of the active ingredient (pyrethrin) in lbs per gallon.
- r. Efficacy data and label claims.
  - i. With regards to the efficacy data, remove all references and associated directions for use of this product to kill or repel fire ants, deer ticks. Data were not submitted or cited to support inclusion of these pests to the label.
  - ii. The Agency is recommending the inclusion of % concentration of pyrethrin in the diluted solutions described on the label instead of stating "dilution by parts". Note that the efficacy data were collected in the range of 0.1% to 0.5%.
  - iii. In the mosquito control directions for use, state the range of application rates for mosquito control, not just the highest amount per acre. You must also either cite or submit efficacy data testing wide-area mosquito control applications for the rates listed on the label.
  - iv. For ease of applicator use, please add a table to the mosquito control directions for use, describing how much product to add to a specified volume of diluent to achieve the desired dilution, together with directives indicating the volumes of neat or diluted product to apply per acre at a specified truck speed. Include backpack use as well. The table must be easy to read.
  - v. Same for q. iv. If aerial application instructions are retained.

4

Daza

Signature of Approving Official:

Date:

718

<sup>&</sup>lt;sup>a</sup> All Environmental Hazards language must be within the Environmental Hazards section, and contradictory language will detract from FIFRA mandated language.

Within 1 year from the date of this stamped approved label, Whitmire Micro-Gen Research Laboratories must submit the following studies: one(1) year storage stability (830.6320) and Corrosion Characteristics (830.6320) studies. Within 45 days, Whitmire Micro-Gen Research Laboratories must provide revised labeling addressing all of the label revision items identified above, and an accompanying letter of commitment to satisfy these data requirements, and cite data for item r.i above, or provide acceptable data within 1 year of the stamped label.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely,

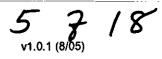
I do hal

Richard J. Gebken Product Manager 10 **Insecticide Branch Registration Division (7505C)** 

enclosures

3.

4 718



# TC 245

- For use on growing crops, ornamentals, stored products, livestock, and fruit fly control on harvested fruits and vegetables.
- May be used alone as a clean-up spray or a pre-harvest spray.

#### **ACTIVE INGREDIENT:**

Pyrethrins, a botanical insecticide	
Piperonyl butoxide, technical*	
OTHER INGREDIENTS:	
Contains Petroleum Distillate	TOTAL: 100.00%

\* Equivalent to 48% (butylcarbityl)(6-propylpiperonyl) ether and 12% related compounds.

# KEEP OUT OF REACH OF CHILDREN CAUTION

See back panel for First Aid and Precautionary Statements.

EPA Reg. No. 499-LNA · EPA Est. No. 499-MO-1

**ULTRA LOW DOSAGE THROUGH MICRON GENERATION** 

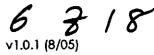
# **NET CONTENTS:**



WHITMIRE MICRO-GEN RESEARCH LABORATORIES, INC. 800-777-8570

ACCEPTED with COMMENTS In EPA Letter Dated NOV 2 3 2005

Failer the Federal Insecticide, Installe, and Rodenticide Act, is examined, for the posticide informed under EPA Reg. No. 499 - 506



#### FIRST AID

IF SWALLOWED: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by poison control center or doctor. Do not give ANY liquid to the person. 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 the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for 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 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-800-225-3320 for emergency medical treatment information.

NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

#### PRECAUTIONARY STATEMENTS

See full label for complete Precautionary Statements.

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or inhaled. Avoid breathing spray mist. Causes eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

#### Users should:

#### USER SAFETY RECOMMENDATIONS

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

# **DIRECTIONS FOR USE**

#### IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

See full label for complete Directions for Use.

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.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling entitled Agricultural Use Requirements in the "Directions for Use" section of the full label for information about this standard.

#### NON-AGRICULTURAL 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, or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

8 v1.0.1 (8/05)

## STORAGE AND DISPOSAL

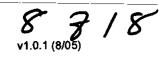
Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Store in a cool, dry place. Keep container closed.

**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:** Empty container by using the product in accordance with the label directions. Do not reuse this container! Place empty container in trash or offer for recycling if available. If container is partly filled, call your local solid waste agency or call 1-800-CLEANUP for disposal instructions. NEVER PLACE UNUSED PRODUCT DOWN ANY INDOOR OR OUTDOOR DRAIN!

A Prescription Treatment<sup>®</sup> brand insecticide from: Whitmire Micro-Gen Research Laboratories, Inc. 3568 Tree Court Industrial Blvd. St. Louis MO 63122-6682 www.wmmg.com © 2005 Whitmire Micro-Gen Research Laboratories, Inc.



# TC 245

- For use on growing crops, ornamentals, stored products, livestock, and fruit fly control on harvested fruits and vegetables.
- May be used alone as a clean-up spray or a pre-harvest spray.

#### **ACTIVE INGREDIENT:**

Pyrethrins, a botanical insecticide	
Piperonyl butoxide, technical*	
OTHER INGREDIENTS:	
Contains Petroleum Distillate	TOTAL: 100.00%

\* Equivalent to 48% (butylcarbityl)(6-propylpiperonyl) ether and 12% related compounds.

# KEEP OUT OF REACH OF CHILDREN CAUTION

#### **FIRST AID**

IF SWALLOWED: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by poison control center or doctor. Do not give ANY liquid to the person. 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 the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for 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 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.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call 1-800-225-3320 for emergency medical treatment information.

NOTE TO PHYSICIAN: Contains petroleum distillate - vomiting may cause aspiration pneumonia.

See page 2 for Precautionary Statements

EPA Reg. No. 499-LNA • EPA Est. No. 499-MO-1

**ULTRA LOW DOSAGE THROUGH MICRON GENERATION** 



WHITMIRE MICRO-GEN

RESEARCH LABORATORIES, INC. 800-777-8570

# PRECAUTIONARY STATEMENTS

1.0.1 (8/05)

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or inhaled. Avoid breathing spray mist. Causes eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

**PERSONAL PROTECTIVE EQUIPMENT (PPE):** Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

Applicators and other handlers who may be exposed to the dilute and/or concentrate through application or other tasks must wear: Long-sleeved shirt and long pants; Chemical-resistant gloves, such as, Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; Shoes plus socks; 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.

When handlers use 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.

#### Users should:

#### USER SAFETY RECOMMENDATIONS

- Wash hands before eating, drinking, chewing gum, using tobacco or using the 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 fish. 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. Drift from treated areas may be hazardous to organisms in adjacent aquatic sites. Do not contaminate water when disposing of equipment washwaters.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

See separate directions and precautions for mosquito control applications.

#### 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.

TC 245 may be used on most crops because its active ingredients are exempt from tolerances when applied to growing crops. The crop grouping scheme used on this label was devised by the Environmental Protection Agency to expedite minor use pesticide registration. Each crop grouping on this label contains the phrase "Including, but not limited to." and then lists a number of crops in each group. This wording allows the use of TC 245 on crops that may not be specifically listed on this label (providing that the group to which the crop belongs is listed).

#### 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

18 0.1 (8/05)

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 Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls; Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton; Shoes plus socks; Protective eyewear.

#### NON-AGRICULTURAL 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, or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

**CONTROLS INSECTS:** Such as Ants, Aphids, Apple Maggots, Armyworms, Artichoke Plume Moths, Asparagus Beetles, Beet Armyworms, Bagworms, Bean Beetles, Blister Beetles, Blow Flies, Biting Flies, Boll Weevils, Cabbage Loopers, Cankerworms, Carrot Weevils, Caterpillars, Clover Mites, Clover Weevils, Cockroaches, 12spotted Cucumber Beetles, Codling Moths, Colorado Potato Beetles, Corn Earworms, Crickets, Crane Files, Crickets, Cross-striped Cabbageworms, Cucumber Beetles, Deer Flies, Deer Ticks, Earwigs, Diamondback Larvae, Eastern Tent Caterpillars, Elm Leaf Beetles, European Corn Borers, European Pine Tip Moths, Face Flies, Fall Webworms, Fire Ants, Firebrats, Fireworms, Flea Beetles, Flies, Forest Tent Caterpillars, Fungus Gnats, Fruit Flies, Fruittree Leafrollers, Grape Leafhoppers, Grape Leaf Skeletonizers, Grasshoppers, Green Fruit Worms, Green Peach Aphids, Greenhouse Thrips, Gypsy Moths (adults & larvae), Harlequin Bugs, Heliothis sp, Hornets, Horn Flies, Hornworms, Horse Flies, House Flies, Imported Cabbageworms, Indian Meal Moths, Japanese Beetles, Katydids, Lace Bugs, Leafhoppers, Leafrollers, Leaftiers, Lice, Loopers, Lygus, Mealy Bugs, Mediterranean Flour Moths, Mexican Bean Beetles, Midges, Millipedes, Mosquitoes, Mushroom Flies, Navel Orangeworms, Onion Maggots, Pear Psylla, Potato Leafhoppers, Psyllids, Rice Weevils, Saw Toothed Grain Beetles, Silverfish, Skippers, Sowbugs, Spiders, Stable Flies, Stink Bugs, Tabanidae, Tarnished Plant Bugs, Thrips, Tomato Hornworms, Vinegar Flies, Wasps, Webworms, Whiteflies and Yellow Jackets.

#### **GENERAL USE DIRECTIONS**

- Remove pets and birds, and cover and turn off fish aquariums before spraying.
- When using in an enclosed area, do not remain in treated area. Ventilate area after treatment is completed.
- When using this product as a space spray in food processing plants, food should be removed or covered during treatment. Do not apply as a space spray while food processing is underway. Food processing surfaces and equipment must be covered during treatment or cleaned with a suitable detergent and rinsed with potable water before reuse. Except in Federally inspected meat and poultry plants, food processing operations may continue when this product is applied as a surface or pin stream Crack and Crevice spray with care and in accordance with the directions and precautions given on this label.

**USED ALONE:** This concentrate can also be used as a clean-up or a pre-harvest spray where other materials cannot be used because of residue restrictions. Contains natural pyrethrins.

USED IN COMBINATION WITH OTHER INSECTICIDES: TC 245 may be combined with other insecticides and acaricides where resistance may be a problem and to provide a flushing of insects from hiding and into contact with other spray residues for quicker and more complete control. The application must conform to the accepted use precautions and directions for both products.

Prior to tank-mixing, a compatibility test should be conducted using the proper proportions of chemicals and water to ensure the physical compatibility of the mixture.

Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions, No label application rates nay be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

Apply 2 to 16 ounces per acre and repeat if required to maintain effective control. Use in sufficient water for thorough coverage of upper and lower leaf surfaces unless otherwise noted. This product may be applied by air in no less than 2 gallons of water per acre and by ground in no less than 10 gallons of water per acre. It is recommended that the final spray mix be buffered to a pH of 5.5-7.0.

To avoid possible harm to honey bees, it is advisable to apply in the early morning or late evening hours.

# 11 7 18 v1.0.1 (8/05)

#### **USE THROUGH IRRIGATION SYSTEMS (CHEMIGATION)**

Apply this product only through sprinkler (including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for the operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the pump motor stops. The irrigation line or water pump must include a functional pressure valve which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must be a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Constant agitation must be maintained in the chemical supply tank during the entire period of insecticide application. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of more dilute suspension per unit of time.

#### **GROWING CROPS (OUTDOORS AND IN GREENHOUSES)**

**ROOT AND TUBER VEGETABLES:** Including (but not limited to) Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichoke, Jerusalem Artichoke, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassava (bitter or sweet), Celeriac (celery root), Chayote, Chervil (turnip rooted), Chicory, Chufa, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip rooted), Parsnip, Potato, Radish, Japanese Radish (Daikon), Rutabaga, Salsify, Black Salsify, Spanish Salsify, SkIrret, Sweet Potato, Tanier, Turmeric, Turnip, Yam (true), Yam Bean.

LEAVES OF ROOT AND TUBER VEGETABLES: Including (but not limited to) Garden Beet, Sugar Beet, Edible Burdock, Carrot, Cassava (bitter or sweet), Celeriac (celery root), Chervil (Turnip Rooted), Chicory, Dasheen (taro), Parsnip, Radish, Japanese Radish (Daikon), Rutabaga, Black Salsify, Sweet Potato, Tanler, Turnip, Yam (true).

BULB VEGETABLES: (Allium spp.): Including (but not limited to) Garlic, Great-headed Garlic, Leek, Onion (dry bulb and green), Welch, Shallot.

LEAFY VEGETABLES: Including (but not limited to) Amaranth (leafy Amaranth, Chinese Spinach, Tampala). Arrugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Cilantro, Com Salad, Chrysanthemum (edible leaved). Chrysanthemum (garland), Cress (garden. water), Upland Cress (yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Fennel (Florence), lettuce (head and leafy), Orach, Parsley, Purslane (garden & winter), Radicchio, Rhubarb, Spinach, Vine Spinach (Malabar, Indian), Spinach (New Zealand) and Swiss Chard.

**BRASSICA (COLE) LEAFY VEGETABLES:** Including (but not limited to) Broccoli, Chinese Broccoli (Gal Lan), Broccoli raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach and Rape Greens.

LEGUME VEGETABLES (SUCCULENT OR DRIED): Including (but not limited to) Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Black-eyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yardlong Beans, Broad Beans (Fava Beans), Chick Peas

8 18

(Garbanzo Beans), Guar, Jackbean (Sword Bean), Lablab Bean (Hyacinth Bean), Lentils, Peas (Edible Pod Pea, Garden Peas, Field Peas, Sugar Snap Peas, English Pea, Snow Pea), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin and Sword Bean.

**FOLIAGE OF LEGUME VEGETABLES:** Including (but not limited to) Plant parts of any legume vegetable included in the legume vegetable group that will be used as animal feed including any variety of Beans, Field Peas or Soybeans.

FRUITING VEGETABLES: Including (but not limited to) Eggplant, Ground Cherry, Okra, Pepino, Pepper (Bell Pepper, Chili Peppers, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillo and Tomato.

**CUCURBIT VEGETABLES:** Including (but not limited to) Balsam Apple, Balsam Pear (Bitter Melon), Chayote, Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Muskmelons (Including hybrids, Cantaloupe, Casaba, Crenshaw, Golden Pershaw Melon, Honeydew Melons, Honey Balls, Mango Melon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon), Pumpkin, Squash (summer & winter) and Watermelon (Including hybrids).

**CITRUS FRUITS:** Including (but not limited to) Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (Tangerine), Orange (sweet & sour), Pummelo, Satsuma Mandarin (Citrus spp. Includes Chironja, Tangelos, Tangors).

**POME FRUITS:** Including (but not limited to) Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear and Quince.

STONE FRUITS: Including (but not limited to) Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum and Plumcot.

SMALL FRUITS AND BERRIES: Including (but not limited to) Blackberry, Blueberry, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Grape, Huckleberry, Loganberry, Olallie Berry, Raspberry (black & red), Strawberry and Youngberry.

**TREE NUTS:** Including (but not limited to) Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory Nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut, Black and English (Persian).

**ORIENTAL VEGETABLES:** Including (but not limited to) Acerola, Atemoya, Balsam Pear (bitter melon), Carambola, Japanese Artichoke, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy, Napa), Chinese Mustard Cabbage (Gai Choy), Dasheen, Ginger, Ginseng, Chinese Longbeans, Mung Beans, Citron Melon, Balsam Pear (Bitter Melon), Japanese Radish (Daikon), Chinese Spinach, Chinese Waxgourd, Cilantro, Citron Melon, Rambutan and Water Chestnuts.

**SUBTROPICAL FRUITS:** Avocado, Banana, Carob, Barbados Cherry, Cherimoya, Dates, Durian (Jackfruit), Feijoa, Figs, Guava, Kiwifruit, Lychee Mango, Papaya, Passion Fruit, Paw Paw, Persimmon, Pineapple and Pomegranate.

ADDITIONAL CROPS: Including Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Okra, Peanuts, Pineapple, Safflowers, Sesame, Sugar Cane, Sunflowers and Tea.

**CEREAL GRAINS:** Including (but not limited to), Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl, Popcorn, Rice, Rye, Sorghum (milo), Teosine, Triticale, Wheat, Wild Rice.

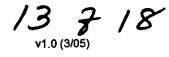
**FORAGE FODDER AND STRAW OF CEREAL GRAINS:** Including (but not limited to), Barley, Buckwheat, Corn (Sweet and Field), Millet, Proso, Oats, Pearl, Popcorn, Rice, Rye, Sorghum (Milo), Teosine, Triticale, Wheat and Wild Rice.

**GRASSES FOR SEED- FORAGE, FODDER AND HAY:** Including (but not limited to) any grass (Gramineal family, (green or cured), except sugarcane and those listed in the cereal grains group) that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage, Bermuda Grass, Bluegrass, Bromegrass and Fescue.

NON-GRASS ANIMAL FEEDS: Including (but not limited to) Alfalfa, Velvet Bean, Clover, Kudzu, Lespedeza, Lupin, Sainfoin, Trefoil, Crown Vetch and Wilk Vetch.

HERBS AND SPICES: Including (but not limited to) Allspice, Angelica, Anise (Anise seed), Annatto, Bałm, Basil, Borage, Burnet, Camomile, Caper Buds, Caraway, Black Caraway, Cardamon, Cassia bark, Cassia buds, Catnip, Celery Seed, Chervil dried, Chives, Chinese Chive, Clary, Clove Buds, Coriander (cilantro or Chinese parsley leaf), Coriander (cilantro seed), Costmary, Culantro, Cumin, Curry Leaf, Dill (dill weed), Dill (seed), Fennel (Italian and Sweet), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf & seed), Mace, Marigold, Sweet Marjoram, Wild Marjoram, Mustard (seed), Nasturtium, Nutmeg, Parsley, Oregano, Mint, Paprika, Parsley, Pennyroyal, Pepper (black & white), Poppy seed, Rosemary, Rue, Saffron,

#### [FULL LABEL]



Sage, Savory, Summer and Winter Savory, Sweet Bay (Bay Leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff and Wormwood.

**ORNAMENTALS:** Including (but not limited to): African Violet, Ageraturm, Andromeda, Arborvitae, Ash, Aster, Azalea, Beech, Begonia, Birch, Boxwood, Cacti, Calceolaria, Calendula, Calla, Camellia, Camation, Ceanothus, Cineraria, Chrysanthemum, Coleus, Cotoneaster, Crabapple, Cyclamen, Cypress, Daffodil, Dahlia, Delphinium, Dogwood, Elm, Euonymus, Fern, Ficus, Fir, Firethorn, Foliage Plants, Forsithia, Fuschia, Gardenia, Geranium, Gladiolus, Gloxinia, Gypsophila, Hawthorn, Hemlock, Hickory, Holly, Honey Locust, Horse Chestnut, Hyacinth, Hydrangea, Iris, Lilies, Maidenhair Fern, Juniper, Larch, Laurel, Lilac, Linden, Marigold, Mimosa (Silk Tree), Myrtle, Narcissus, Oak, Palm, Pansy, Pelargonium, Peony, Petunia, Philodendron, Phlox, Pine, Privet, Pyracantha, Rhododendron, Roses, Rubber Plant, Snapdragon, Stock, Sweet Pea, Tulip, Tulip Tree, Viburnum, Wandering Jew, Willow, Yew, Zinnia,

#### **GREENHOUSE FRUITS, VEGETABLES, FLOWERS AND FOLIAGE PLANTS**

**USED ALONE:** Combine 12 to 24 ounces of TC 245 with 100 gallons of water for applications with conventional hydraulic sprayers or 1 to 2 teaspoons per gallon of water for applications with compressed air sprayers.

**USED IN COMBINATION WITH OTHER INSECTICIDES:** To provide quick knockdown of insects when used with a residual insecticide, tank mix 1 to 4 ounces of TC 245 with the proper amount of companion Insecticide in 100 gallons of water and apply with a conventional hydraulic sprayer.

Applications must be made in accordance with the more restrictive label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

**IMPORTANT NOTE:** Plant safety is an important consideration when using insecticides in a greenhouse. However, it is not possible to evaluate the phytotoxicity of TC 245 towards numerous plant varieties that may react differently to insecticides in different growth stages or under varying environmental conditions. Before making widespread applications of TC 245, treat a limited number of plants and observe for phytotoxicity over a 10 day period.

#### OUTDOOR USE ON TREES, SHRUBS, FLOWERS AND FOLIAGE PLANTS

**USED ALONE:** Combine 12 to 24 ounces of TC 245 with 100 gallons of water for applications with conventional hydraulic and airblast sprayers or 12 to 24 ounces of TC 245 with 10 gallons of water for applications with low volume mist blowers or 1 to 2 teaspoons per gallon water for applications with compressed air sprayers.

**USED IN COMBINATION WITH OTHER INSECTICIDES:** To provide quick knockdown of insects when used with a residual insecticide, tank mix 1 to 4 ounces of TC 245 with the proper amount of companion insecticide in 100 gallons of water (10 gallons of water for low volume application with mist blowers) and apply with conventional hydraulic or airblast sprayers.

Applications must be made in accordance with the more restrictive label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

FOR CONTROL OF GYPSY MOTH CATERPILLARS AND ADULTS: Combine 8 to 12 ounces of TC 245 with 100 gallons of water for applications with conventional hydraulic sprayers or 8 to 12 ounces of TC 245 with 10 gallons of water for applications with airblast sprayers. To provide quick knockdown on gypsy moth caterpillars when used with a residual insecticide, tank-mix 1 to 4 ounces of TC 245 with the proper amount of companion insecticide in 100 gallons of water (10 gallons of water for airblast sprayers) and apply with a conventional hydraulic sprayer.

Applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

#### INDOOR USE ON TREES, SHRUBS, FLOWERS AND FOLIAGE PLANTS

**USED ALONE:** Combine 12 to 24 ounces of TC 245 with 100 gallons of water for applications with conventional hydraulic sprayers or 1 to 2 teaspoons of TC 245 per gallon of water for applications with compressed air sprayers.

**USED IN COMBINATION WITH OTHER INSECTICIDES:** To provide quick knockdown of insects when used with a residual insecticide, tank-mix 1 to 4 ounces of TC 245 with the proper amount of companion insecticide in 100 gallons of water and apply with a conventional hydraulic sprayer.

Applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

#### HARVESTED FRUITS AND VEGETABLES

Including Apples, Blackberries, Blueberries, Boysenberries, Cherries, Crabapples, Currants, Dewberries, Figs, Gooseberries, Grapes, Guavas, Loganberries, Mangoes, Muskmelons, Oranges, Peaches, Pears, Peas, Pineapples, Plums, Raspberries and Tomatoes.

DIRECT SPRAY TO FRUITS IN BASKETS, ON TRUCKS OR IN PROCESSING PLANTS: To control Drosophila spp., Tephritid spp., Fruit Flies, Vinegar Flies and other nuisance pests, dilute this concentrate at the rate of 1 part with 1,200 parts water (1 pint per 150 gallons or 1 teaspoon per 12.5 pints water). Thoroughly mix the emulsion in the spray tank and treat as follows:

- Apply liberally to fruits and vegetables in baskets, on trucks and in processing plants. Use sprayers at a high pressure for applying at the rate of 5 or 6 pints of diluted spray to a 2 ton load of produce. Direct the spray for maximum coverage of the baskets or hampers. It is important to spray between and beneath the containers.
- 2) Spray the raw stock stacked in the yard.
- 3) Dip baskets in the diluted spray, after dumping the produce, to kill adhering larvae and pupae.

FOR USE IN CANNERIES: The entire space inside of the cannery should be sprayed after washing and cleaning up and just before bringing produce into it, with this product diluted 1 part to 29 parts of water (1 quart with 7.5 gallons water) up to 1 part to 11 parts of water (1 quart with 3 gallons water). AS A SURFACE SPRAY: Use 1 gallon of the spray per 750 square feet, directing it on walls, ceiling, and floors paying special attention to forcing the spray into all cracks and crevices for the control of ants, roaches, silverfish, crickets, spiders and cheese mites. This same dilution used as a space spray will give excellent control of fruit flies, house flies, hornets, grain moths, gnats, mosquitoes, and skipper files. AS A SPACE SPRAY: Use 1 ounce diluted spray per 1000 cubic feet of space. Close room or warehouse and shut off all ventilating systems. Use a spraying device such as Whitmire Micro-Gen ULV equipment to dispense this product as a fine mist in the air above the trays and shelves. Do not apply to fruit directly. Do not remain in treated areas after application, and leave room closed for at least one hour. Ventilate thoroughly before occupants are allowed to re-enter. Repeat application at this dosage in any given month. Do not spray while the plant is in operation as dead flies may fall into containers or the products being processed.

FOR USE WITH HYDROPONICALLY GROWN VEGETABLES AS A WATER SYSTEM TREATMENT: To control aquatic diptera larvae, apply TC 245 to the water at the rates outlined in the following table:

Pyrethrins Concentration	Pro-Control Pyrethrin 6EC	Amount of Water	
0.1 ppm	2.18 fl. oz. (64.6 ml)	10,000 gal.	
0.01 ppm	0.218 tsp. (6.46 ml)	10,000 gal.	
0.001 ppm	0.022 tsp. (0.646 ml)	10,000 gal.	

#### STORED PRODUCTS

This concentrate can be used at the rate of 1 part to 29 parts up to 1 part to 11 parts water or deodorized base oil can be used on rice, barley, beans, birdseed, buckwheat, cocca beans, corn, cottonseed, flax, oats, grain nuts, dried fruit, almond nutmeat and shells, walnut nutmeat and shells, pistachios, dried prunes, dried apricots, raisins, figs, wheat, oats, corn, barley, rye, sorghum, wheat, tobacco and peanuts held in storage for control of the accessible stages of Almond Moths, Angoumois Grain Moths, Cadelle Beetles, Cigarette Beetles, Confused Flour Beetles, Flat Grain Beetles, Granary Weevils, Indian Meal Moths, Red Flour Beetles, Rice Weevils, Rusty Grain Beetles, Saw-toothed Grain Beetles, Square Necked Grain Beetles, and Tobacco Moths. Reapply when insects reappear but not more than once per week.

FOR USE ON SWEET POTATOES IN STORAGE: For control of Fruit Flies and Vinegar Flies dilute this concentrate at 1 part to 19 parts water (6.4 fluid ounces per gallon). Apply as a space fog with a mechanical fogger capable of producing particles of aerosol size at the rate of 1 gallon diluted spray per 100,000 cubic feet of space. Apply only when flying insects are present. Several applications may be necessary during period of heavy infestation, but do not make more than 10 applications.

SURFACE TREATMENT OF STORED GRAIN AND SEED: To control Indian Meal Moths, Angoumois Grain Moths and Mediterranean Flour Moths, monthly inspections should be made after the grain is placed in storage. If the top two or three inches are infested, dilute 1 part TC 245 with 19 parts of water and apply at the rate of 1 to 2 gallons per 1,000 square feet of grain. Rake the mixture into the grain to a depth of 4 inches.

#### [FULL LABEL]

FOR USE AS A GRAIN PROTECTANT: This concentrate when diluted with water and sprayed directly on grain will effectively protect the grain against grain storage insects for a full season or approximately 8 months. Dilute at the rate of 1 part to 29 parts water (1 quart with 7.5 gallons water). Thoroughly mix the emulsion and apply at the rate of 4 to 5 gallons per 1000 bushels of grain as it is carried along a belt or as it enters the auger or elevator.

**ON ALMONDS, PEANUTS, AND WALNUTS IN BULK OR IN BAGS:** To control accessible stages of stored product insects such as Almond Moths, Angoumois Grain Moths, Ants, Cadelles, Cigarette Beetles, Confused Flour Beetles, Drugstore Beetles, Flat Grain Beetles, Granary Weevils, Indian Meal Moths, Lesser Grain Borers, Maize Weevils, Mediterranean Flour Moths, Merchant Grain Beetles, Red Flour Beetles, Rice Weevils, Rusty Grain Beetles, Sawtoothed Grain Beetles and Square Necked Grain Beetles, dilute 1.5 ounces of TC 245 per gallon of water and apply as a coarse wet spray over the top of stored nuts or the outside surface of stacked bagged nuts at the rate of 4 gallons per 1,000 square feet. Apply at weekly intervals for about 6 weeks and then at 15 day intervals. The first two applications should be applied at the rate of 4 gallons per 1,000 square feet.

FOR USE IN STORAGE SITES: This concentrate can be used to treat grain and seed in warehouse bins and trucks, cargo ships, mills, bin hoppers, elevators and conveying equipment as a clean up prior to using them for storage. In mills and elevators, all grain infested accumulations should be removed from the bin hoppers. All storage areas and conveying equipment should be thoroughly cleaned by sweeping out the waste grain, cobwebs and other debris from the walls and rafters as well as on the floor and door frames with special attention to material lodged in the cracks and crevices. All of the debris should be removed and burned to kill eggs and insects that might be present.

For farms, particular attention should be given to cleaning up around the used feed and grain bags, grain residues from wagons, harvesting equipment and feed troughs. Newly harvested grain should not be placed in the same bin with carry-over grain and all carry-over grain stocks that are not treated with grain protectant should be furnigated. These cleaning operations should be done within two or three weeks before harvest.

After above sanitation measures have been employed, spray all areas prior to use for storage with 1 part to 29 parts water (1 quart with 7.5 gallons water) up to 1 part to 11 parts (1 quart with 3 gallons water). Apply at the rate of 1 gallon per 750 square feet on walls, floors, ceilings and partition boards of bins, paying particular attention to forcing the spray into all cracks and crevices.

Monthly inspections should be made. If the top 2 or 3 inches are found to be infested, re-treat applying at the rate of 1 to 2 gallons of diluted material per 1000 bushels of stored product.

#### LIVESTOCK AND POULTRY SPRAY

- To kill and repel from flies, house flies, mosquitoes and gnats, dilute at the rate of 1 to 2 fluid ounces per gallon of water and apply to wet the hair thoroughly with particular attention to topline, underline, flanks, withers and other infested areas. Repeat treatment at intervals of 5 to 12 days for small insect populations or as needed when flies are emerging in large numbers.
- 2) To kill and repel stable flies, horse flies, and deer flies, dilute at the rate of 2 to 3 fluid ounces per gallon of water and apply at a quart per adult animals to wet the hair thoroughly with particular attention to the legs, flanks, barrel, topline and other body areas commonly attached by these flies. Repeat treatment each week as needed.
- 3) To kill and repel face flies, dilute at the rate of 2 fluid ounces per gallon of water and apply using spray which produces large wetting droplets. Apply to the face of the animal in the morning before releasing to pasture. Apply sufficiently to wet the face but not more than 1.5 ounces per animal. Repeat daily as needed.
- 4) For effective control of biting and sucking lice on cattle, horses, sheep, goats and hogs, dilute at the rate of 1 quart with 75 gallons of water (1 fluid ounce with 2 gallons) and spray to thoroughly wet the hair of the animal including the head and brush of the tail. Repeat treatments in 10 days to kill newly hatched lice.
- 5) To control poultry lice, using a dilution of 2 to 3 ounces of concentrate per gallon of water, spray roosts, walls and nests or cages thoroughly. It is not necessary to remove poultry from the housing unit during treatment. This should be followed by spraying over the birds with a fine mist.
- 6) For control of bedbugs and mites on poultry and in poultry houses, dilute at the rate of 2 to 3 fluid ounces per gallon of water and spray crevices of roost poles, cracks in walls and cracks in nests where they bedbugs and mites hide. This should be followed by spraying over the birds with a fine mist.
- 7) To control sheep "tick" or ked, dilute at the rate of 1 to 2 fluid ounces per 4 gallons of water and thoroughly wet all portions of the body by dipping or by spraying with sufficient pressure and with a nozzle adjustment to give penetration of the wool. Treat at a rate sufficient to wet the animal.

16 8 18

8) To kill fleas and ticks on livestock, and to obtain protection against reinfestation, dilute at the rate of 2 fluid ounces per gallon of water and wet the animal by dipping or spraying.

FOR USE IN BARNS, DAIRIES, MILKING PARLORS, MILING ROOMS AND POULTRY HOUSES: To control flying insects including, but not limited to, Flies, Fruit Flies, Mosquitoes, Gnats, Wasps, Hornets and Small Flying Moths, dilute at the rate of 2 fluid ounces per gallon of water. Apply as a fog or fine mist (at approximately 2 ounces per 1000 cubic feet of space), directing the nozzle for maximum coverage and above livestock and poultry toward the ceiling and upper corners of the area being treated. For best results, close doors and windows before spraying, and keep them closed for 10 to 15 minutes. Applicator should vacate the treated area and ventilate it prior to returning.

#### **OTHER INDOOR USES**

**CRAWLING AND FLYING INSECTS:** For control of accessible, exposed stages of CRAWLING INSECTS including but not limited to, Ants, Cockroaches, Cadelles, Cigarette Beetles, Confused Flour Beetles, Dark Mealworms, Dried Fruit Beetles, Drugstore Beetles, Grain Mites, Red Flour Beetles, Rice Weevils, Sawtoothed Grain Beetles, Spider Beetles, Yellow Mealworms and FLYING INSECTS including, but not limited to, Angoumois Grain Moths, Cheese Skippers, Fruit Flies, Fungus Gnats, Gnats, House Flies, Indian Meal Moths, Mosquitoes, Mediterranean Flour Moths, Small Flying Moths, Tobacco Moths: dilute 1 part TC 245 with 11 parts of water or oil (10.67 ounces per gallon) and apply at the rate of 1 ounce per 1,000 cubic feet of space. Direct the spray towards the ceiling and upper corners of the area and behind obstructions. Vacate the treated area and keep the area closed for at least 30 minutes after treatment. Ventilate the area before reoccupying.

AS A SPACE SPRAY IN FOOD AND NONFOOD AREAS OF FOOD PROCESSING PLANTS, INDUSTRIAL INSTALLATIONS, BAKERIES, RICE AND WHEAT MILLS, RESTAURANTS, TOBACCO WAREHOUSES, GRAIN ELEVATORS, HOMES AND WAREHOUSES: To kill flying Insects such as fruit flies, house flies, hornets, wasps, grain moths, gnats, mosquitoes and skipper flies, dilute this concentrate at the rate of 1 part with 29 parts water (1 quart with 7.5 gallons water) up to 1 part to 11 parts water (1 quart with 3 gallons water). Use at the rate of 1/2 to 1 ounce of diluted spray per 1000 cubic feet of space. Direct the space treatment upward whenever practical, and keep doors and windows closed for at least 10 minutes after application. The use of this product in food processing or food handling establishments should be confined to time periods when the plant is not in operation. Food should be removed or covered during treatments. All food processing surfaces should be covered during treatment or thoroughly cleaned before use.

Where oil residues are not undesirable, this product can be diluted at the rate of 1 part to 29 parts up to 1 part to 11 parts in deodorized base oil instead of water and applied as a space spray with any good type applicator such as mechanical or ULV fogger capable of producing particles of aerosol size.

USE AS A SURFACE SPRAY IN HOMES, RESTAURANTS, FOOD PRECESSING PLANTS, INDUSTRIAL INSTALLATIONS AND WAREHOUSES to control accessible, exposed stages of crawling insects including, but not limited to, Ants, Cockroaches, Cadelles, Cigarette Beetles, Confused Flour Beetles, Dark Mealworms, Dried Fruit Beetles, Drugstore Beetles, Grain Mites, Red Flour Beetles, Rice Weevils, Sawtoothed Grain Beetles, Spider Beetles and Yellow Mealworms: dilute 1 part TC 245 with 59 parts water and apply at the rate of 1 gallon to 750 square feet, paying special attention to force the spray into all cracks and crevices.

Except in Federally inspected meat and poultry plants, food processing operations may continue when this product is applied as a surface spray with care and in accordance with the directions and precautions given above.

FOR USDA INSPECTED FACILITIES: To control accessible, exposed stages of crawling insects including, but not limited to, ants, cockroaches, cadelles, cigarette beetles, confused flour beetles, dark mealworms, dried fruit beetles, drugstore beetles, grain mites, red flour beetles, rice weevils, saw-toothed grain beetles, spider beetles and yellow mealworms: dilute 1 part TC 245 with 19 parts of water and apply at the rate of 1 gallon to 750 square feet, paying special attention to force the spray into all cracks and crevices.

#### OUTDOOR USE AROUND HOMES AND OTHER BUILDINGS

In grassy undeveloped areas use this concentrate at 1 part to 59 parts water to control foraging fire ants. Also spray grassy areas around yard borders liberally to control ticks that may carry Lyme Disease.

#### OUTDOOR USE – MOSQUITO CONTROL: HOME AND GARDEN also controls gnats, flies and midges

(For wide area community applications, see the Wide Area Mosquito Control section for appropriate Precautions and Directions for Use.)

#### [FULL LABEL]

1.0 (3/05)

**SURFACE SPRAY:** To control adult mosquitoes use hand-held pressure or backpack sprayers. Dilute product 1 part to 23 parts water to 1 part product to 59 parts water. Use up to 150 gallons of diluted spray per acre. Treat mosquito resting areas such as plant foliage.

**ULV APPLICATION:** To control adult mosquitoes, use cold aerosol ULV sprayers or thermal fogging devices. Dilute product 1 part to 23 parts oil to 1 part product to 59 parts oil. Use 1 ounce of diluted product per 100 square feet. To treat vegetation in water from land, allow the wind to move product into the vegetation. Do not spray directly over or into the water.

# WIDE AREA MOSQUITO CONTROL

(For wide area community applications by ground or aerial equipment, Ultra Low Volume (ULV) sprays or fogs.) For use only by federal, state, tribal, or local government officials responsible for public health or vector control, or by persons certified in the appropriate category or otherwise authorized by the state or tribal lead pesticide regulatory agency to perform adult mosquito control applications, or by persons under their direct supervision.

# **PRECAUTIONARY STATEMENTS**

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or inhaled. Avoid breathing spray mist. Causes eye irritation. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is highly toxic to fish. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish. Before making the first application in a season, it is advisable to consult with the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

Do not apply over bodies of water (lakes, rivers, permanent streams, natural ponds, commercial fish ponds, swamps, marshes or estuaries) except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment rinsate or washwaters.

#### 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

TC 245 may be used for mosquito control programs involving residential, industrial, recreational and agricultural areas as well as swamps, marshes, overgrown waste areas, roadsides and pastures where adult mosquitoes occur. TC 245 may be used over agricultural crops. For best results, apply when meteorological conditions create a temperature inversion and wind speed does not exceed 5 miles per hour. The application should be made so the wind will carry the insecticidal fog into the area being treated. Do not re-treat a site more than once in 24 hours; no more than 14 applications should be made to a site in any 2 weeks. More frequent treatments may be made to prevent or control a threat to public and/or animal health determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

When used in cold aerosol generators, mechanical or electronic foggers, or misting equipment that produce a fog with the majority of droplets in the 5 - 50 micron range, TC 245 should be diluted with light mineral oil (specific gravity of approximately 0.8 at 60° F, boiling point: 500-840° F). An N.F. grade oil is preferred.

#### **GROUND-BASED APPLICATION**

To control adult mosquitoes and biting flies, apply up to 0.007 pounds of pyrethrins per acre (use a 300 foot swath width for acreage calculations). Treatment of vegetation at the water's edge is permitted by allowing the wind to move the product into the vegetation.

Spray equipment must be adjusted so that the volume median diameter is less than 50 microns (Dv  $0.5 < 50 \mu$ m) and that 90% of the spray is contained in droplets smaller than 100 microns (Dv  $0.9 < 100 \mu$ m). Directions from

the equipment manufacturer or vendor, pesticide registrant or a test facility using a laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

8

**TRUCK-MOUNTED ULV APPLICATION:** Dilute 5 parts of TC 245 with 1 part of oil and apply at the rate of 2 to 2.25 ounces per minute while the machine is traveling 5 miles per hour. The nozzle should be positioned approximately 30 degrees above the horizontal off the side of the truck bed. The delivery rate and truck speed may be varied as long as the application rate is 0.002 to 0.007 pounds of pyrethrins per acre (use a 300 foot swath width for acreage calculations).

**BACKPACK SPRAYER APPLICATION:** Apply 0.002 to 0.007 pounds of pyrethrins per acre. Dilute 1 part TC 245 with 12 parts of oil and apply at the rate of 7 ounces per acre (based on a 50 foot swath, 7 ounces should be applied while walking 870 feet).

**AERIAL APPLICATION (FIXED WING AND HELICOPTER):** To control adult mosquitoes and biting flies, apply up to 0.007 pounds of pyrethrins per acre with equipment designed and operated to produce a ULV spray application.

Spray equipment must be adjusted so that the volume median diameter produced is less than 50 microns (Dv 0.5 < 50  $\mu$ m) and that 90% of the spray is contained in droplets smaller than 100 microns (Dv 0.9 < 100  $\mu$ m). The effects of flight speed and, for anon-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant or test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

# STORAGE AND DISPOSAL

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

STORAGE: Store in a cool, dry place. Keep container closed.

**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: Empty container by using the product in accordance with the label directions. Do not reuse this container! Place empty container in trash or offer for recycling if available. If container is partly filled, call your local solid waste agency or call 1-800-CLEANUP for disposal instructions. NEVER PLACE UNUSED PRODUCT DOWN ANY INDOOR OR OUTDOOR DRAIN!

A Prescription Treatment<sup>®</sup> brand insecticide from: Whitmire Micro-Gen Research Laboratories, Inc. 3568 Tree Court Industrial Blvd. St. Louis MO 63122-6682 www.wmmg.com © 2005 Whitmire Micro-Gen Research Laboratories, Inc.