

53883-151

09/01/2011

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460-0001



OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

September 1, 2011

Anne Turnbough  
Control Solutions, Inc.  
5903 Genoa-Red Bluff Road  
Pasadena, TX 77507

Subject: Amended Reregistration Label for Permethrin and Piperonyl Butoxide  
Product Name: Martin's 31-67 ULV  
EPA Registration Number: 53883-151  
EPA Decision Number: 410189, 413274

Dear Dr. Turnbough,

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all of the information submitted with your application to support the reregistration of the above referenced product in connection with the Permethrin and Piperonyl Butoxide REDs, and has concluded that your submission is acceptable.

NOTE: This product is not being reregistered under sections 3(c)5 and 4(g) of FIFRA at this time.

In addition, please note that the record for this product currently contains the Confidential Statement of Formulation (CSF) listed below. Any previously dated CSFs are superseded.

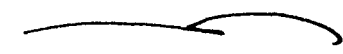
- Basic CSF, dated 4/22/2010

A copy of your label stamped "Accepted" is enclosed along with copies of the acute toxicity and product chemistry reviews completed for the subject product. Products shipped after 12 months from the date of this amendment or the next printing of the label whichever occurs first, must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e).

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If you have any questions about this letter, please contact Julie Chao at (703) 308-8735 or [chao.julie@epa.gov](mailto:chao.julie@epa.gov).

Sincerely,



*h* Richard J. Gebken  
Product Manager (10)  
Insecticide Branch  
Registration Division (7504P)

*Enclosures: Label stamped "Accepted," dated September 1, 2011  
Acute Toxicity Review, dated October 5, 2010  
Product Chemistry Review, dated March 16, 2011*

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**RESTRICTED USE PESTICIDE**  
**Due to Toxicity to Fish and Aquatic Organisms**  
For retail sale to and use only by Certified Applicators, or persons under their direct supervision,  
and only for those uses covered by the Certified Applicator's certification

# MARTIN'S

## 31 - 67 ULV

### For Mosquitoes, Flies and Gnats

A Quick Knockdown, Low Odor, Non-Corrosive Synergized Synthetic Pyrethroid for the Control  
of Adult Mosquitoes in Residential, Recreational, and Other Areas.  
Also for Use Against Biting and Non-Biting Midge and Black Flies

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.

**ACTIVE INGREDIENTS:**

**Permethrin:** (3-phenoxyphenyl) methyl (+/-) cis/trans 3-(2,2-dichloroethenyl)  
2,2-dimethyl- cyclopropanecarboxylate, (+/-) cis (min) 35%, (+/-) trans (max) 65%..... 31.15%  
**Piperonyl Butoxide** (butylcarbityl)(6-propylpiperonyl) ether and related compounds.....  
66.85%

**OTHER INGREDIENTS:**..... 2.00%.....

**TOTAL**..... 100.00%

Contains petroleum distillates.  
Contains 2.86 pounds of Permethrin and 6.13 pounds of Piperonyl Butoxide per gallon.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**  
See [Side Panel] [Inside Attached Booklet] For Additional Precautionary Statements.

**“PRECAUCION AL USUARIO:** Si usted no lee ingles, no use este producto hasta que la etiqueta haya sido  
explicado ampliamente”

**NET CONTENTS:**

1.0 GAL \_\_\_\_\_

2.5 GAL \_\_\_\_\_

30 GAL \_\_\_\_\_

**ACCEPTED**  
**SEP - 1 2011**

**Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for the  
pesticide registered under:**

**EPA. Reg. No:** 53883-151

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**CAUTION:** Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

<b>First Aid</b>	
<b>If Swallowed:</b>	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
<b>If on Skin or Clothing:</b>	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.
<b>If in Eyes:</b>	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. Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact Poison Control Center at 800-222-1222 for emergency medical treatment information.	
<b>NOTE TO PHYSICIAN AND VETERINARIANS:</b> Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Do not administer or instill milk, cream or other substances containing vegetable or animal fats which will enhance absorption of lipophilic substances.	

**Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton. If you want more options, follow the instructions for category E on an EPA chemical-resistant category selection chart.

Mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Chemical-resistant gloves for all handlers except for applicators using motorized ground equipment, pilots, and flaggers
- Chemical-resistant apron for mixers/loaders, persons cleaning equipment and persons exposed to the concentrate.

See **ENGINEERING CONTROLS** for additional requirements.

<b>USER SAFETY REQUIREMENTS</b>
Follow 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. Discard clothing and other absorbent materials that have been drenched (except as required by directions for use) or heavily contaminated with products concentrate. Do not reuse them.

**USER SAFETY RECOMMENDATIONS**

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should 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.

**ENGINEERING CONTROLS:**

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

**ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters.

Under some conditions, it may also have a potential for transport into surface water in runoff (primarily adsorbed to suspended soil particles), for several months or more after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, and areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

**ENVIRONMENTAL HAZARDS FOR WIDE-AREA MOSQUITO ADULTICIDE APPLICATIONS**

When applying as a wide-area mosquito adulticide, before making the first application in a season, it is advisable to consult the state or tribal agency with primary responsibility for pesticide regulation to determine if other regulatory requirements exist.

When applying as a wide-area mosquito adulticide, 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 accidental deposition into the water body.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively, visiting the treatment area except when applications are 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.

**PHYSICAL AND CHEMICAL HAZARDS**

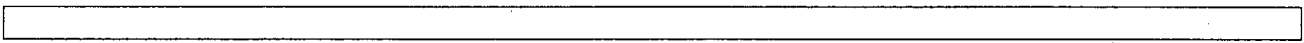
Do not use, pour, spill or store near heat or open flame. Flashpoint greater than 230°F.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### Precautions And Restrictions

- Do not apply this product in a way that will contact workers or other persons, either directly or through drift.
- Only protected workers may be in the application area during application.
- Not for use in metered release systems.
- Do not make applications during rain.
- Not for use in outdoor residential misting systems.



#### STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store product in its original labeled container in a cool, dry, locked place designated for such insecticides and out of reach of children. In case of spillage, soak up with absorbent material such as sawdust, or fullers earth; sweep up and place in a labeled container and dispose of as follows.

**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 (or equivalent) promptly after emptying. Triple rinse as follows:

**For Containers equal to or less than 5 Gallons:** 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 1/4 full with mineral oil 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 for recycling if available. If recycling is not available then dispose of container in a sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**For Containers greater than 5 Gallons:** 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 1/4 full with mineral oil. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over on its other end and tip back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling, if available. If recycling is not available then dispose of container in a sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

**For Bulk Containers: (Refillable Container)** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from the container into application equipment or mix tank. Fill the container about 10 percent full with mineral oil. Agitate vigorously or recirculate mineral oil with pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing process two more times.

#### CONDITIONS AND RATES TO USE FOR MOSQUITO CONTROL

**MARTIN'S 31-67 ULV** is approved for application as an ultra low volume (ULV) non-thermal aerosol (cold fog) to control adult mosquitoes, flies and gnats in residential and recreational areas where these insects

are a problem, such as, but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas, municipalities, gardens, playgrounds, recreational areas and overgrown waste areas. For best results, treat when insects are most active and conditions are conducive to keeping the fog close to the ground e.g. cool temperatures and wind speed not greater than 10 mph. Application during the cool hours of the night or early morning is usually preferable. Apply this product at temperatures greater than 50° F and when wind speed equals or exceeds 1 mph.

Do not re-treat a site more than once in 3 days. Do not exceed more than 25 applications at 0.007 lb permethrin per acre per application, or 0.015 lb PBO per acre per application, or 0.18 lb permethrin per acre per season; or 0.38 lb PBO per acre per year. 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.

**Martin's 31-67 ULV** can be applied over specific growing crops and range grasses prior to harvest for the control of adult mosquitoes and biting flies within or adjacent to these areas. Application can only be made where the following crops are present:

- Almonds
- Apples
- Cherries
- Corn, fodder
- Corn, forage
- Corn grain
- Eggplant
- Range Grasses
- Leafy Vegetables, (except Brassica) <sup>1</sup>
- Mushrooms
- Onions, dry bulb
- Peaches
- Pears
- Peppers, bell
- Range Grasses
- Soybeans
- Tomatoes
- Vegetables, cucurbit <sup>2</sup>
- Walnuts

<sup>1</sup> includes broccoli, Brussels sprouts, cauliflower, celery, collards, lettuce, spinach, turnip greens

<sup>2</sup> includes cantaloups, cucumbers, squash (summer, winter), watermelon, pumpkin

Do not spray this product on or allow it to drift onto cropland (other than crops listed), or potable water supplies. In the treatment of corrals, feedlots, animal confinements/houses, swine lots, poultry ranges and zoos, cover any exposed drinking water, drinking fountains and animal feed before application.

**GROUND APPLICATION INSTRUCTIONS**

**DROPLET SIZE CALIBRATION FOR GROUND APPLICATION EQUIPMENT:** Spray equipment must be adjusted so that the volume median diameter is less than 30 microns (Dv 0.5 < 25 um) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv 0.9 < 40 um). 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.

For proper ground application, mount the fog applicator so that the nozzle is at least 4 ½ feet above ground level and directed out the back of the vehicle. Failure to follow the above directions may result in reduced effectiveness.

**MARTIN'S 31-67 ULV Non-Thermal Aerosol (cold fog) Application:** To control mosquitoes, midges, black flies and other biting flies, apply **MARTIN'S 31-67 ULV** using any standard ULV ground applicator capable of producing a non-thermal aerosol spray. Apply the product undiluted at a flow rate of 2.0 ounces per minute at an average vehicle speed of 10 mph. If a different vehicle speed is used, adjust the rate accordingly. These rates are equivalent to 0.0035 to 0.007 pounds of permethrin and 0.0075 to 0.015 pounds of piperonyl butoxide per acre. Vary flow rates accordingly to vegetation density and mosquito population. Use of the maximum flow rates and application rates listed on this label is recommended to treat heavy vegetation or when target insect populations are high. An accurate flow meter must be used to ensure the proper flow rate. **MARTIN'S 31-67 ULV** may also be applied by diluting with a suitable solvent such as mineral oil and applying so as not to exceed the maximum pounds of active ingredient per acre as shown in the first column of the tables below. The following charts represent some suggested dilution and application rates for ground ULV applications. If an alternative dilution rate is used, adjust the flow rate accordingly.

**Undiluted Use Rates for MARTIN'S 31-67 ULV**

Permethrin Lbs./Acre	Application Rates/Fluid Ounces To Use Per Minute			Fl. Oz. MARTIN'S 31-67 ULV per Acre
	5 mph	10 mph	15 mph	
0.007	1.0	2.0	3.0	0.33
0.0035	0.5	1.0	1.5	0.16

**For a 1:2 MARTIN'S 31-67 ULV/Solvent Dilution Ratio**

Mix one (1) part MARTIN'S 31-67 ULV with two (2) parts solvent and apply at the following rates.

Permethrin Lbs./Acre	Application Rates/Fluid Ounces To Use Per Minute			Fl. Oz. Finished Spray per Acre
	5 mph	10 mph	15 mph	
0.007	3.0	6.0	9.0	1.0
0.0035	1.5	3.0	4.5	0.5
0.00175	0.75	1.5	2.25	0.25

**For a 1:4 MARTIN'S 31-67 ULV/Solvent Dilution Ratio**

Mix one (1) part MARTIN'S 31-67 ULV with four (4) parts solvent and apply at the following rates.

Permethrin Lbs./Acre	Application Rates/Fluid Ounces To Use Per Minute			Fl. Oz. Finished Spray per Acre
	5 mph	10 mph	15 mph	
0.007	5.0	10.0	15.0	1.6
0.0035	2.5	5.0	7.5	0.8
0.00175	1.25	2.5	3.5	0.4

**For a 1:8 MARTIN'S 31-67 ULV/Solvent Dilution Ratio**

Mix one (1) part MARTIN'S 31-67 ULV with eight (8) parts solvent and apply at the following rates.

Permethrin Lbs./Acre	Application Rates/Fluid Ounces To Use Per Minute			Fl. Oz. Finished Spray per Acre
	5 mph	10 mph	15 mph	
0.007	9.0	18.0	27.0	3.0



0.0035	4.5	9.0	13.5	1.5
0.00175	2.25	4.5	6.75	0.75

**AERIAL APPLICATION INSTRUCTIONS**

Do not apply by fixed wing aircraft at a height less than 100 feet, or by helicopter at a height less than 75 feet, unless specifically approved by the state or tribe based on public health needs.

**Aerial Application Made at Less Than 200 Feet Above Ground Elevation:**

Spray equipment must be adjusted so that the Volume Median Diameter is less than 60 microns (Dv 0.5 < 60 um), and that 90% of the spray is contained in droplets smaller than 100 microns (Dv 0.9 < 100 microns). The effects of flight speed, and for non-rotary nozzles, nozzle angle, on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to product 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.

**Aerial Application Made at More Than 200 Feet Above Ground Elevation:**

Spray equipment must be adjusted so that the Volume Median Diameter is less than 70 microns (Dv 0.5 < 70 um), and that 90% of the spray is contained in droplets smaller than 145 microns (Dv 0.9 < 145 microns). The effects of flight speed, and for non-rotary nozzles, nozzle angle, on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to product acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rates are properly calibrated.

Applications should be made by suitable aerial ULV equipment with a minimum spray boom height of 100 feet from the ground for fixed wing or rotary aircraft. Flow rate should be set so as to achieve 0.16 to 0.33 fluid ounces MARTIN'S 31-67 ULV per acre of undiluted product. MARTIN'S 31-67 ULV may also be diluted with a suitable solvent such as mineral oil according to the table "For a 1:2 MARTIN'S 31-67 ULV/Solvent Dilution Ratio" and applied by aerial ULV equipment so long as 1.0 fluid ounce per acre of the 1:2 dilution is not exceeded. For fixed wing and rotary aircraft with flat fan or rotary nozzles, apply at a sufficient airspeed to deliver the appropriate amount of a.i./acre (0.00175 to 0.007 lb. permethrin a.i./acre and 0.0075 to 0.016 lbs. piperonyl butoxide a.i./acre) and to achieve the appropriate droplet range as prescribed by this label.

**IN FLORIDA:** Do not apply by aircraft except in emergency situations and with the approval of the Bureau of Entomology and Pest Control, Florida Department of Agriculture and Consumer Services.

**NOTICE:** To the extent provided by law, buyer and user assume all risks and liability of use, storage and/or handling of this product not in accordance with the terms of this label. [Optional Marketing Language]

**DISCLAIMER OF WARRANTIES:** CONTROL SOLUTIONS, INC. WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL AND IS REASONABLY FIT FOR THE PURPOSES STATED ON THE LABEL WHEN USED IN ACCORDANCE WITH THE DIRECTIONS FOR USE. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. INEFFECTIVENESS OR OTHER UNINTENDED CONSEQUENCES MAY RESULT BECAUSE OF SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF CONTROL SOLUTIONS, INC. TO THE FULLEST EXTENT PERMITTED BY LAW, CONTROL SOLUTIONS, INC. SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER.

EXCEPT AS EXPRESSLY PROVIDED HEREIN, CONTROL SOLUTIONS, INC. MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESSED OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE, BUYER'S OR USER'S EXCLUSIVE REMEDY AND CONTROL SOLUTIONS, INC. TOTAL LIABILITY, SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT. [Optional Marketing Language]

Control Solutions, Inc.  
5903 Genoa-Red Bluff  
Pasadena, TX 77507-1041

EPA Reg. No. 53883-151  
EPA Est. No. 53883-TX-002