

8329-62

08-10-2011

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



OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

August 10, 2011

Karen Larson  
Clarke Mosquito Control Products Inc.  
110 E. Irving Park Rd., 4<sup>th</sup> Floor  
Roselle, IL 60172

Subject: Amended Reregistration Label  
Product Name: Anvil 10+10 ULV  
EPA Registration Number: 8329-62  
EPA Decision Numbers: 427177 and 410568

Dear Ms. Cameron:

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 phenothrin and piperonyl butoxide (PBO) 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.

Please be reminded that 40 CFR Part 156.140(a)(4) requires that a batch code, lot number, or other code identifying the batch of the pesticide distributed and sold be placed on non-refillable containers. The code may appear either on the label or durably marked on the container itself, and can be added by non-notification per PRN 98-10.

Please note that the record for this product currently contains the Confidential Statements of Formulation (CSFs) listed below. Any previously dated CSFs are superseded.

- Basic CSF, dated 1/29/10

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

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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).

If you have any questions about this letter, please contact Jennifer Urbanski at 703-347-0156 or [urbanski.jennifer@epa.gov](mailto:urbanski.jennifer@epa.gov).

Sincerely,



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

*Enclosures: Label stamped "Accepted," dated 7/26/11  
Acute Toxicity Review, dated 3/31/10  
Product Chemistry Review, dated 7/8/10*

AUG 10 2011

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

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**ANVIL® 10+10 ULV**

{Alternate Brand Name: CLARKE ANVIL 10+10ULV}

EPA. Reg. No: 8329-62

An Oil Soluble Synergized Pyrethroid for Control of Adult Mosquitoes (Including Organophosphate Resistant Species) in Outdoor Residential and Recreational Areas.

[For Aerial or Ground Application]

<b>Active Ingredients</b>	
Sumithrin™ [3-phenoxybenzyl-(1RS, 3RS; 1RS, 3SR)-2,2-dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate.....	10.0%
Piperonyl Butoxide * .....	10.0%
Other Ingredients ** .....	80.0%
	100.0%
Contains 0.74 pounds Sumithrin and 0.74 pounds Piperonyl Butoxide [PBO] per gallon	
* PBO, (butyl carbityl) (6-propylpiperonyl) ether and related compounds.	
** Contains petroleum distillate	

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

FIRST AID	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-214-7753 for emergency medical treatment information	
<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 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>NOTE TO PHYSICIAN: Product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.</b>	

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**Caution.** Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing. In case of contact, flush with plenty of water. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE):** Mixers, loaders, applicators and other handlers must wear the following: long sleeved shirt and long pants, shoes and socks, and chemical-resistant gloves (selection category E). See engineering controls for additional requirements.

**User Safety Requirements:** 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 material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

<b>User Safety Recommendations:</b> 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. As soon as possible, wash thoroughly and change into clean clothing.
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**Engineering Controls:** Pilots must use an enclosed cockpit that meet 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 toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. 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 wash waters.

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 recover effort.

#### **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.**

##### Use Restrictions:

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.

**IN CALIFORNIA:** This product is to be applied by County Health Department, State Department of Health Services, Mosquito and Vector Control or Mosquito Abatement District personnel, or persons under contract to these entities only.

**IN FLORIDA:** Do not apply by aircraft unless approved by the Florida Department of Agriculture and Consumer Services.

Do not treat a site with more than 0.0036 lbs of Sumithrin and 0.0036 lbs piperonyl butoxide [PBO] per acre in a 24-hour period. Do not exceed more than 1.0 lb Sumithrin or 1.0 lb piperonyl butoxide [PBO] in any site in one 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.

Do not contaminate food, feed or drinking water. In treatment of corrals, feed lots, swine lots and zoos, cover any exposed drinking water, drinking water fountains and animal feed before application.

Not for use in outdoor residential misting systems.

### USE INFORMATION

ANVIL® 10+10 ULV is approved for application as a thermal aerosol and as an Ultra Low Volume (ULV) nonthermal aerosol (cold fog) in mosquito adulticiding programs involving outdoor residential and recreational areas where adult mosquitoes are present in annoying numbers, and in vegetation surrounding parks, woodlands, swamps, marshes, overgrown areas and golf courses. ANVIL® 10+10 ULV may be applied over agricultural areas prior to harvest for the control of adult mosquitoes within or adjacent to these areas.

For best results, apply when mosquitoes are most active and weather conditions are conducive to keeping the fog close to the ground. Application in calm air conditions is to be avoided. Apply only when wind speed is greater than or equal to 1 mph. All types of applications should be conducted at temperatures above 50 °F.

Note: ANVIL® 10+10 ULV cannot be diluted in water. Dilute this product with light mineral oil if dilution is preferred.

### SPRAY DROPLET SIZE DETERMINATION

**Ground equipment, wide-area mosquito abatement application:** Spray equipment must be adjusted so that the volume median diameter (VMD) is less than 30 microns ( $D_v 0.5 < 30 \text{ um}$ ) and that 90% of the spray is contained in droplets smaller than 50 microns ( $D_v 0.9 < 50 \text{ um}$ ). 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.

**Aerial equipment, wide-area mosquito abatement application:** Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns ( $D_v 0.5 < 60 \text{ um}$ ) and that 90% of the spray is contained in droplets smaller than 80 microns ( $D_v 0.9 < 80 \text{ um}$ ). 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 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.

### GROUND APPLICATION

Apply ANVIL® 10+10 ULV diluted or undiluted through a standard ULV cold aerosol or non-thermal aerosol (Cold Fog) generator. Consult the following table for various flow rates and equivalent dose, using a swath width of 300 feet for acreage calculations.

Vary flow rate according to vegetation density and mosquito population. Use higher flow rate in heavy vegetation or when populations are high.

Sumithrin/PBO Pounds per Acre	Application Rates Fl.oz./Min.				Fl.oz. ANVIL® 10+10 ULV per Acre
	5MPH	10MPH	15MPH	20MPH	
0.0036	1.9	3.8	5.7	7.6	0.62
0.0024	1.3	2.5	3.8	5.1	0.42
0.0012	0.6	1.3	1.9	2.5	0.21

ANVIL® 10+10 ULV may also be applied with non-thermal, portable, motorized backpack equipment adjusted to deliver ULV particles of less than 100 microns VMD. Use 0.21 to 0.62 fluid ounces of the undiluted spray per acre, with a 50-foot [15.2 m] swath and walking at an average speed of 2 mph [3.2 kph]. Dilute with a suitable mineral oil if dilution is preferred. Do not exceed 0.62 fluid ounces of the undiluted spray per acre. Do NOT use portable backpack equipment for application in enclosed spaces.

ANVIL® 10+10 ULV may be applied through truck mounted thermal fogging equipment and vehicle speeds of 5 to 20 mph. To reduce oil requirement and sludge buildup in equipment, use a 60-100 second viscosity mineral "fog" oil, or other fuel-type oil. Dilute sufficiently to provide thorough coverage. Do not exceed 0.62 fluid ounces of ANVIL® 10+10 ULV per acre. Use a clean, well-maintained and properly calibrated fogger. Do not wet foliage since oil base formulations may be phytotoxic. For use with hand-carried foggers, use same rates of active ingredient

per acre and a swath width of 50 ft and a walking speed of 2 mph for flow calculations. Fog downwind, with the wind at your back. Do NOT use hand-carried thermal foggers in enclosed spaces.

#### AERIAL APPLICATION

ANVIL® 10+10 ULV may be applied at rates of 0.21 to 0.62 fluid ounces ANVIL® 10+10 ULV by fixed wing or rotary aircraft equipped with suitable ULV application equipment. Dilute with a suitable solvent, such as mineral oil, if dilution is preferred. Do not exceed 0.62 fluid ounces per acre of the ANVIL® 10+10 ULV concentrate. Do not apply by fixed wing aircraft at a height less than 100 feet above the ground or canopy, or by helicopter at a height less than 75 feet above the ground or canopy, unless specifically approved by the state or tribe based on public health needs.

#### STORAGE & DISPOSAL

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

**PESTICIDE STORAGE AND SPILL PROCEDURES:** Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spill or leakage, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

#### CONTAINER HANDLING:

[For Nonrefillable containers of 5 gallons or less]

[Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with mineral oil and recap. Shake for 10 seconds. Pour rinsate into application equipment or a rinse 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. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.]

[Or for Nonrefillable containers over 5 gallons:]

[Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank. Fill the container ¼ 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 it back and forth several times. Turn the container over onto its other end and tip it 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 or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.]

[For Refillable Containers]

[Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into rinsate collection system. Repeat his rinsing procedure two more times. Then offer for recycling, if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.]

IN CASE OF MEDICAL EMERGENCY,  
CALL THE INTERNATIONAL POISON CONTROL CENTER  
1-800-214-7753  
IN CASE OF TRANSPORTATION EMERGENCY,

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CALL INFO-TRAC 1-800-553-5053

**FOR MORE INFORMATION CALL: 1-800-323-5727**

NOTICE: To the extent provided by law, seller makes no warranty, expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use/handling of this material when use and/or handling is contrary to label instructions.

ANVIL® is a Registered Trademark of Clarke Mosquito Control Products, Inc.  
SUMITHRIN™ is a Trademark of Sumitomo Company Ltd.

Manufactured By  
**CLARKE MOSQUITO CONTROL PRODUCTS, INC.**  
159 N. GARDEN AVENUE  
ROSELLE, ILLINOIS 60172

EPA Reg. No.: 8329-62  
EPA Est. No.: 8329-IL-01

NET CONTENTS: \_\_\_\_\_  
LOT NO.: \_\_\_\_\_