



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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

August 23, 2004

Karen J. Larson
Clarke Mosquito Control Products, Inc.
195 North Garden Avenue
Roselle, Illinois 60172

Subject: Label Amendment - Adding additional Use Instructions
Biomist 31+66 ULV
EPA Reg. No. 8329-43
Your Submission Dated: April 1, 2004

Dear Ms. Larson:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

1. Replace "Wash thoroughly with soap and water after handling and before eating or smoking" with "Wash thoroughly with soap and after handling and before eating, drinking, chewing gum or using tobacco." in the Precautionary Statements section.
2. Re-instate "Do not allow spray treatment to drift on pastureland, cropland (other than crops listed) or water supplies." to the Environmental Hazards section.

Since the product contains less than 10% petroleum distillate you may revise the Label as follows:

- a. Delete "Contains petroleum distillate".
- b. Delete "Note to Physician" statements.

- c. Replace "Do not give any liquid to the person" with "Have person sip a glass of water if able to swallow" in the *If Swallowed*, First Aid statement.

If you have any questions regarding this action, please contact BeWanda Alexander of my team at (703) 305-7460.

Sincerely,

A handwritten signature in cursive script that reads "BeWanda Alexander for".

George T. LaRocca

Product Manager (13)

Insecticide Branch

Registration Division (7505C)

ACCEPTED
with COMMENTS
In EPA Letter Dated

AUG 23 2004

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.

8329-43

DRAFT LABELING

BIOMIST® 31+66 ULV

For Application Only by Public Health Officials and Trained Personnel of Mosquito Abatement Districts and Other Mosquito Control Programs. For Use Outdoors as an Ultra-Low Volume (ULV) Application to Control Adult Mosquitoes in Residential and Recreational Areas.

Active Ingredients

Permethrin (3-Phenoxyphenyl) methyl (+/-) cis, trans-3-(2,2-dichlorethenyl)-2,2-dimethyl cyclopropanecarboxylate	31.28%
Piperonyl Butoxide, Technical *	66.00%
Other Ingredients **	2.72%
	100.00%

Contains 2.86 pounds of Permethrin and
6.09 pounds of Piperonyl Butoxide per gallon.

* Equivalent to 80% (butylcarbityl)(6-propylpiperonyl) ether and 20% related compounds.

** Contains petroleum distillate

CAUTION KEEP OUT OF REACH OF CHILDREN

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

EPA Reg. No.: 8329-43

EPA Est. No.: _____

NET CONTENTS: _____

LOT NO.: _____

FIRST AID

Have product container or label with you when calling a poison control center or doctor, or going for treatment. For Medical Emergencies, call the International Poison Control Center at 1-800-214-7753.

IF SWALLOWED:	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.
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. Call a poison control center or doctor for further 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.

NOTE TO PHYSICIAN: Product contains a petroleum distillate. Gastric lavage is indicated if material was taken internally. Vomiting may cause aspiration pneumonia.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Caution. Harmful if swallowed. Harmful if absorbed through skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing of spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before use.

ENVIRONMENTAL HAZARDS

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

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Flashpoint minimum of 300 °F.

DIRECTIONS FOR USE

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

CONDITIONS and RATES to USE for MOSQUITO CONTROL

Permethrin Pounds per Acre	Application Rates Fl.oz./Min.			Fl.oz. Biomist 31+66 ULV per Acre
	5MPH	10MPH	15MPH	
0.0210	3.0	6.0	9.0	1.0
0.0105	1.5	3.0	4.5	0.5
0.0035	0.5	1.0	1.5	0.16

BIOMIST® 31+66 ULV is recommended for applications as an ultra low volume (ULV) nonthermal aerosol (cold fog) to control adult mosquitoes in residential and recreational areas and other areas these insects occur, such as but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas and municipalities, gardens, playgrounds, recreational areas and overgrown waste areas. Do not apply this product within 100 feet (30 meters) of lakes and streams. For best results treat when mosquitoes are most active and weather conditions are conducive to keeping the spray cloud close to the ground. An inversion of air temperatures and a light breeze is preferable. During applications, ground wind speeds should not exceed 10 MPH. Application after sunset or before sunrise is usually preferable.

BIOMIST® 31+66 ULV can be applied over specific growing crops and range grasses prior to harvest for the control of adult mosquitoes within or adjacent to these areas. Application can only be made where the following crops are present:

Almond	Corn, fodder	Onion, dry bulb
Apple	Corn, forage	Peach
Broccoli	Corn grain	Pear
Brussels sprouts	Eggplant	Pepper, bell
Cabbage	Range Grasses	Soybean
Celery	Leafy vegetables (except Brassica)	Tomato
Cauliflower	Lettuce, head	Vegetables, cucurbit, group 9
Cherry	Mushroom	Walnut

In the treatment of corrals, feedlots, swine lots, poultry ranges and zoos cover any exposed drinking water, drinking fountains and animal feed before application.

Aerosol droplet size of BIOMIST® 31+66 ULV application may be determined using generally acceptable methods such as, but not limited to, A.I.M.S.; PC-DC-III, or Teflon® coated glass slides. When using coated glass slides, an adequate volume of air should be sampled by using, for example, rotating slide impingers. Depending on the apparatus used, follow manufacturer's instructions for obtaining droplet measurements. Slides should be examined microscopically and the diameter of the droplets measured in microns. Slides should be scanned until at least 200 droplets have been sized. A spread factor of 0.66 should be used to correct droplet diameters. The optimum droplet size range is from 8 to 20 microns volume median diameter (VMD).

ULV Nonthermal Aerosol (Cold Fog) Application – Ground Application: Apply BIOMIST® 31+66 ULV using any standard ULV ground applicator capable of producing a nonthermal aerosol spray with a VMD of 8 to 20 microns. No more than 3% of the droplets should exceed 50 microns. Apply undiluted at a flow rate of 1.0 to 6.0 fluid ounces per minute, and an average vehicle speed of 10 MPH. If a different vehicle speed is used, adjust rate accordingly. These rates are equivalent to 0.0035 to 0.021 pounds of Permethrin per acre. Vary flow rate according to vegetation density and mosquito population. Use higher flow rate in heavy vegetation or when populations are high. BIOMIST® 31+66 ULV may also be applied by diluting with a suitable solvent such as mineral oil and applying so as not to exceed 0.021 pounds Permethrin per acre. The following charts represent some suggested dilution and application rates for ground ULV applications. If an alternate dilution rate is used, adjust flow rate accordingly.

FOR A 1:2 BIOMIST 31+66 ULV/SOLVENT DILUTION RATIO

Mix one (1) part BIOMIST® 31+66 with two (2) parts solvent and apply at the following rates.

Permethrin Pounds per Acre	Application Rates Fl.oz./Min.			Fl.oz. Biomist 31+66 ULV per Acre
	5MPH	10MPH	15MPH	
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 BIOMIST 31+66 ULV/SOLVENT DILUTION RATIO

Mix one (1) part BIOMIST® 31+66 with four (4) parts solvent and apply at the following rates.

Permethrin Pounds per Acre	Application Rates Fl.oz./Min.			Fl.oz. Biomist 31+66 ULV per Acre
	5MPH	10MPH	15MPH	
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 BIOMIST 31+66 ULV/SOLVENT DILUTION RATIO

Mix one (1) part BIOMIST® 31+66 with eight (8) parts solvent and apply at the following rates.

Permethrin Pounds per Acre	Application Rates Fl.oz./Min.			Fl.oz. Biomist 31+66 ULV per Acre
	5MPH	10MPH	15MPH	
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

For proper application, mount the equipment 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.

ULV Nonthermal Aerosol (Cold Fog) Application – Aerial Application: BIOMIST® 31+66 ULV may be applied undiluted at rates 0.33 to 1.0 fl.oz. BIOMIST® 31+66 ULV per acre by fixed wing or rotary aircraft equipped with suitable ULV application equipment. BIOMIST® 31+66 ULV may also be diluted with a suitable solvent such as mineral oil and applied by aerial ULV equipment so long as 1.0 fluid ounce per acre of BIOMIST® 31+66 ULV is not exceeded. Aerial application should be made at an altitude below 300 feet and at a forward speed necessary to achieve a droplet VMD of 20 to 50 microns, with no more than 2.5% exceeding 100 microns. Do not apply when ground wind speeds exceed 10 MPH. Aerial applications shall only be made when recommended by public health officials and trained personnel of mosquito abatement districts and other mosquito control programs.

IN FLORIDA: Do not apply by aircraft except in emergency situations and with the approval of the Florida Department of Agriculture & Consumer Services.

Urban ULV Mosquito Control Applications: For control of resting or flying adult mosquitoes in areas such as utility tunnels, sewers, storm drains and catch basins, pipe chases, underground basements, underground passages, parking decks, crawl spaces or uninhabited buildings, apply BIOMIST® 31+66 ULV undiluted using mechanical foggers, hand-held or truck-mounted ULV equipment, or thermal foggers suitable for this application. Apply BIOMIST® 31+66 ULV at rates up to but not exceeding 0.021 lbs. permethrin per acre.

6/6

STORAGE & DISPOSAL

Do not contaminate food, feed, or water 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: Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

CONTAINER DISPOSAL: Metal containers – triple rinse or equivalent, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic containers – triple rinse, or equivalent, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Then dispose of in a sanitary landfill or by other approved state and local procedures.

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

IN CASE OF TRANSPORTATION EMERGENCY,
CALL INFO-TRACT 1-800-553-5053

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

NOTICE: 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.