

## Permanone® 31-66

FOR USE ONLY BY FEDERAL, STATE, TRIBAL OR LOCAL GOVERNMENT OFFICIALS RESPONSIBLE FOR PUBLIC HEALTH AND VECTOR CONTROL, OR BY PERSONS CERTIFIED BY THE STATE OR TRIBAL LEAD PESTICIDE REGULATORY AGENCY TO PERFORM ADULT MOSQUITO CONTROL APPLICATION, OR BY PERSONS UNDER THEIR DIRECT SUPERVISION.

\* A SYNERGIZED PERMANONE FORMULATION FOR QUICK KNOCKDOWN AND EFFECTIVE CONTROL OF ADULT MOSQUITOES, GNATS, BITING AND NON-BITING MIDGES, BLACKFLIES AND OTHER BITING FLIES

#### **ACTIVE INGREDIENTS:**

*Permethrin:	31.28%
**Piperonyl Butoxide, Technical	
OTHER INGREDIENTS	
TOTAL	100,000/

\*\* Equivalent to 52.8% (butylcarbityl)(6-propylpiperonyl) ether and 13.2% related compounds.

\* (3-phenoxyphenyl) methyl (+/-) cis/trans 3-(2,2 dichloroethenyl) 2,2 dimethyl cyclopropanecarboxylate cis/trans ratio: Max 65% (+/-)trans and min. 35% (+/-) cis.

EPA REG. NO. 432-1250

**EPA EST. NO. 432-TX-1** 

# KEEP OUT OF REACH OF CHILDREN CAUTION

Refer to attached leaflet for complete Directions for Use and Precautionary Statements.

Net Contents

1 Gallon
4191691
4492268C 100410A



FIRST AID				
If swallowed	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>			
If on skin or clothing	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
If inhaled	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>			
If in eyes	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>			
[Synthetic Pyrethroid]				

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. In case of Medical emergencies or health and safety inquiries or in case of fire, leaking or damaged containers, information may be obtained by calling 1-800-334-7577.

## PRECAUTIONARY STATEMENTS

#### **Hazards To Humans & Domestic Animals**

#### **CAUTION:**

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

#### **Environmental Hazards**

This pesticide is extremely toxic to 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. 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 water when disposing of equipment wash waters.

This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow drift when 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. Applications should be timed to provide the maximum possible interval between treatment and the next period of bee activity.

### DIRECTIONS FOR USE

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

#### READ THE ENTIRE LABEL FOR DIRECTIONS.

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 permits or other regulatory requirements exist.

Do not allow spray treatment to drift onto cropland. (other than crops listed) or potable water supplies.

## **INSECTS CONTROLLED**

Adult mosquitoes, gnats, biting and non-biting midges, black flies, stable flies, horse flies, deer flies and other biting flies.

#### WHERE TO USE

Areas that may be treated for insect control include, but are not limited to; parks, campsites, woodlands, athletic fields, golf courses, residential areas and municipalities, gardens, playgrounds, recreational areas, overgrown waste areas and other areas where the labeled pests are a problem. Do not use on crops used for food, forage or pasture.

#### **USE DIRECTIONS**

This product is a synergized concentrate of permethrin containing 2.86 pounds per gallon permethrin. It may be applied undiluted or may be diluted with mineral oils (such as Orchex or Klearol), cottonseed oil or other suitable non-phytotoxic ULV-suitable oil. This product is specifically designed to be applied as a ULV spray. For best results, treat when mosquitoes are most active and weather conditions are conducive to keeping the fog in the air column close to the ground, e.g. cool temperatures and wind speeds are equal to or greater than 1 mph. Application during the cool hours of night or early morning is usually preferable. All types of applications should be conducted at temperatures above 50°F.

Do not exceed 25 applications at 0.007 pounds of permethrin per acre (not to exceed a total of 0.18 pounds of permethrin per acre) in any given season. More frequent applications 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. Application during the cooler hours of the night or early morning is recommended.

Permanone Insecticide Concentrate can be applied to the air column over specific growing crops prior to harvest and range grasses for the control of adult mosquitoes and biting flies within or adjacent to these areas. Application can be made where the following crops are present:

Alfalfa Cauliflower Almonds Cherries Corn, fodder Apples Artichoke, globe Corn. forage

Corn grain, (field and pop) Asparagus

Avocado Corn.stover

Broccoli Corn, sweet kernel + cob

Brussels sprouts with husks removed Cabbage Eggplant

Filbert Celerv

Garlic Range grasses

Horseradish Kiwi fruit Leafy vegetables (except Brassica)

Lettuce, head Mushrooms

Onions, dry bulb **Peaches** 

**Pears** 

Peppers, bell Pistachio **Potato** 

Sovbeans Spinach **Tomatoes** 

Vegetables, cucurbit

Walnuts Watercress

## Spray Droplet Size Determination **Ground Equipment:**

Spray equipment must be adjusted so that the volume median diameter is less than 30 microns (Dy 0.5 < 30 um) and that 90% of the spray is contained in droplets smaller than 50 microns (Dv  $0.9 < 50 \mu m$ ). 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.

Aerial Equipment:

Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns (Dv  $0.5 < 60 \mu m$ ) and that 90% of the spray is contained in droplets smaller than 115 microns (Dv  $0.9 < 115 \mu m$ ). 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**

Vehicle-Mounted ULV Cold Aerosol Generators or Vehicle-Mounted Non-Thermal Aerosol (Cold Fog): Apply through non-thermal ULV application equipment and base acreage calculations on the equipment manufacturer's recommended swath width. Apply at a rate not to exceed 0.007 pounds of permethrin per acre in a given 24 hour period. An optimum swath is created when PERMANONE® 31-66 is applied from a truck that is being driven perpendicular to the wind direction. Direct the spray head of equipment to ensure even distribution of the spray cloud throughout the area. For best results, apply when insects are most active and meteorological conditions are conducive to keeping the spray cloud close to the ground. An inversion of air temperatures and a light breeze is preferable. Apply when ground wind speed is equal to or greater than 1 mph.

PERMANONE 31-66 may be applied through ULV Cold Aerosol Generators, or other equipment designed for non-thermal ULV aerosol applications. The desired application rate may be obtained under different conditions by altering the dilution rate of PERMANONE 31-66, the flow rate of the insecticide from the application equipment and the vehicle speed. Examples are given in the following Dilution Table.

DILLITION TABLE

SPACE SPRAY					
Undiluted	*Diluted 1:2	*Diluted 1:4			
0.0035 lb ai/acre permethrin	5 10 15 20	0.5 1.0 1.5 2.0	1.5 3.0 4.5 6.0	2.5 5.0 7.5 10.0	
0.007 lb ai/acre permethrin	5 10 15 20	1.0 2.0 3.0 4.0	3.0 6.0 9.0 12.0	5.0 10.0 15.0	

<sup>\*</sup>Dilution instructions specify volume ratios of product: diluent (ie. 1:2 equals 1 volume part Permanone mixed with 2 volume parts diluent).

Best results are expected by application when weather conditions favor an inversion of temperatures in the area treated. Apply when ground wind speed is equal to or greater than 1 mph. Apply using vehicle mounted non thermal ULV equipment to create an insecticidal swath. Early morning and evening are the best times for application.

Temperature fluctuations may require periodical adjustment of equipment to deliver the desired flow rate at the specified speed of travel. This flow rate must be maintained to insure the distribution of the proper amount of active ingredient per acre.

## **AERIAL APPLICATION**

PERMANONE 31-66 may be applied either diluted or undiluted at rates of 0.0035 to 0.007 pounds permethrin per acre by fixed wing or rotary aircraft that are capable of making a ULV application. Do not apply by fixed wing aircraft at a height less than 100 feet, or by helicopter at a height less than 75 feet. For best results, treat when insects are most active and meteorological conditions are conducive to keeping the spray cloud in the air column close to the ground. In order to compensate for windy conditions and ensure drift onto the target area aerial application with aircraft equipped with Global Positioning Systems (GPS) is recommended.

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

## STORAGE AND 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 may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure 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 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 or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

## IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability. **CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

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