

MASTERLINE KONTROL 2 – 2

For Mosquitoes, Flies and Gnats

An All Temperature, 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 Application only by Public Health Officials and Trained Personnel of Mosquito Abatement Districts and Other Mosquito Control Programs

ACTIVE INGREDIENTS:

Permethrin (3-phenoxyphenyl)methyl(+/-)Cis/trans 3-(2,2-dichloroethenyl) 2,2-Dimethyl cyclopropanecarboxylate.....2.0%

Piperonyl Butoxide Technical
Equivalent to 80% (butylcarbityl)(6-propylpiperonyl) ether and 20% related compounds.....2.0%

INERT INGREDIENTS :.....96.0%

Contains a Petroleum Distillate Solvent

TOTAL.....100.0%

Contains 0.144 pounds of Permethrin and 0.144 pounds of Piperonyl Butoxide per gallon.

KEEP OUT OF REACH OF CHILDREN
CAUTION
See Side Panel For Additional Precautionary Statements

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

FIRST AID	
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 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 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 eye. 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 by mouth-to-mouth, if possible. Call a poison control center or doctor for further advice
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
Note to Physician: Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

NET CONTENTS:

2.5 GAL _____ 30 GAL _____ 55 GAL _____ 275 GAL _____

PRECAUTIONARY STATEMENTS

HAZARDS TO DOMESTIC ANIMALS AND HUMANS

Caution: Causes moderate eye irritation. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

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 sites may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment 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.

PHYSICAL AND CHEMICAL HAZARDS

Do not use, pour, spill 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.

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: (Metal) Triple rinse or equivalent. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by other approved State and local procedures. (Plastic) Triple rinse or equivalent. 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.

Container Disposal for Refillable Containers: Replace the dry disconnect cap, if applicable, and seal all openings which have been opened during use.

BULK STORAGE AND DISPOSAL

AGITATE BEFORE USE

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Storage: Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material.

Pesticide Disposal: Pesticide spray mixture or rinsate that cannot be used according to label instructions must be disposed of according to Federal and local procedures under Subtitle C or the Resource Conservation and Recovery Act.

CONDITIONS AND RATES TO USE FOR MOSQUITO CONTROL

Do not apply this product within 100 feet (30 meters) of fish bearing areas. Do not allow spray treatment to drift onto pastureland, cropland, poultry ranges or water supplies.

KONTROL 2-2 may be applied either diluted or undiluted as a thermal or non-thermal fog. Applicators should wear long sleeved shirt, long pants, shoes and socks.

KONTROL 2-2 is recommended for application in ultra low volume (ULV) non-thermal aerosol (cold fog) to control adult mosquitoes, midges and black flies 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. Both ground and aerial applications should be made when meteorological conditions are conducive to keeping the spray cloud close to the ground, such as when air temperature inversion is present. Applications during the cool hours of early morning or evening are preferable. Do not apply when wind speeds exceed 10 mph or during calm air conditions (wind speeds < 2-3 mph).

Droplet Size of **KONTROL 2-2** application may be determined using the following procedure: Droplet size should be measured using silicon slides. An adequate volume of air should be sampled by using, for example, rotating rod samplers. Slides are examined microscopically and the diameter of droplets measured in microns. Slides should be scanned until 100-200 droplets have been assessed. A spread factor of 0.61 should be used to correct droplet diameters. The largest droplet should not exceed 50 microns and less than 5% of the droplets should be below 5 microns. A 90% value of the droplets should be in the range of 5 to 30 microns in size.

Conditions and Rates to Use Kontrol 2-2 Undiluted for Mosquito Control

Permethrin/PBO Lbs. A.I./Acre	Application Rates/Fluid Ounces To Use Per Minute				Fl. Oz. Kontrol 2-2 per Acre
	5 mph	10 mph	15 mph	20 mph	
0.007/0.007	18.8	Not Recommended	Not Recommended	Not Recommended	6.2
0.0035/0.0035	9.4	18.8	Not Recommended	Not Recommended	3.1
0.00175/0.00175	4.7	9.4	14.1	18.9	1.6

ULV NON-THERMAL AEROSOL (COLD FOG) APPLICATION: To control mosquitoes, midges and black flies, apply **KONTROL 2 – 2** using any standard ULV ground applicator, with a swath width of 300 ft., capable of producing a non-thermal aerosol spray with droplets ranging in size up to 48 micron in diameter and mass medium diameter (MMD) 15 to 20 microns. Apply the product undiluted at a flow rate of 4.7 to 18.8 fluid ounces per minute at an average vehicle speed of 5 mph. If different vehicle speed is used, adjust the rate accordingly. Vary flow rates accordingly to vegetation density and mosquito population. Use higher flow rates in heavy vegetation or when populations are high. An accurate flow control system must be used to ensure proper flow rate. Do not exceed a flow rate of 20 fl. oz./min. May be applied at truck speeds of 5 to 20 mph.

THERMAL AEROSOL FOGGING

Truck Mounted: Apply undiluted with suitable Thermal Fogging equipment. Do not exceed the maximum a.i./acre rates. May be applied at speeds of 5 to 20 mph. To reduce oil requirement and sludge buildup in equipment, use 100-second viscosity mineral “fog” oil. For use with hand foggers, use the same a.i./acre rates. Do not wet foliage since the oil base formulation may be phytotoxic. Do not fog when wind conditions exceed 5 miles per hour. Use well maintained and properly calibrated fogger. Fog downwind.

Recommended Dilution Rates to Achieve 0.00175/0.00175 Lbs. A.I./Acre

Machine Output	Dilution Ratio 5 mph	Dilution Ratio 10 mph	Dilution Ratio 15 mph	Dilution Ratio 20 mph
10 gal/hr	1:3.5	1:1.3	1:0.5	1:0.1
20 gal/hr	1:8	1:3.5	1:2	1:1.3
30 gal/hr	1:12.6	1:5.8	1:3.5	1:2.4

Recommended Dilution Rates to Achieve 0.0035/0.0035 Lbs. A.I./Acre

Machine Output	Dilution Ratio 5 mph	Dilution Ratio 10 mph	Dilution Ratio 15 mph	Dilution Ratio 20 mph
10 gal/hr	1:1.3	1:0.2	Not Recommended	Not Recommended
20 gal/hr	1:3.7	1:1.3	1:0.6	1:0.2
30 gal/hr	1:6	1:2.5	1:1.3	1:0.8

Recommended Dilution Rates to Achieve 0.007/0.007 Lbs. A.I./Acre

Machine Output	Dilution Ratio 5 mph	Dilution Ratio 10 mph	Dilution Ratio 15 mph	Dilution Ratio 20 mph
10 gal/hr	1:0.2	Not Recommended	Not Recommended	Not Recommended
20 gal/hr	1:1.3	1:0.2	Not Recommended	Not Recommended
30 gal/hr	1:2.5	1:0.8	1:0.2	Not Recommended

Recommended Dilution Rates for Hand Held Thermal Foggers – 50 Ft. Swath Walking at 2 MPH

Machine Output	Dilution Ratio 0.00175/0.00175 Lbs. A.I./Acre	Dilution Ratio 0.0035/0.0035 Lbs. A.I./Acre	Dilution Ratio 0.007/0.007 Lbs. A.I./Acre
2.0 gal/hr	1:12.5	1:6	1:2.5
5.0 gal/hr	1:32.5	1:16.5	1:7.8
8.0 gal/hr	1:53.3	1:27	1:13

AS A BARRIER SPRAY USING A BACKPACK MISTER TYPE UNIT

For use in non-thermal, portable, motorized backpack equipment, apply **KONTROL 2 - 2** with equipment adjusted to deliver ULV particles of 50 to 100 microns mass median diameter. Use 1.6 to 6.2 fl. oz. of the undiluted spray per acre (equal to 0.00175 to 0.007 lb. A.I./Acre) as a 50 ft (15.2m) swath while walking at a speed of 2 mph (3.2 kph.). May also be applied diluted, make sure that the same amount of A.I. (0.00175 to 0.007 lb.) is applied per acre.

Recommended Dilution Rates for Backpack Mister Type Unit – 50 Ft. Swath Walking at 2 MPH

Machine Output	Dilution Ratio 0.00175/0.00175 Lbs. A.I./Acre	Dilution Ratio 0.0035/0.0035 Lbs. A.I./Acre	Dilution Ratio 0.007/0.007 Lbs. A.I./Acre
1.0 gal/hr	1:5.8	1:2.5	1:0.8
2.0 gal/hr	1:12.5	1:6	1:2.5
3.0 gal/hr	1:19.3	1:9.6	1:4.3
4.0 gal/hr	1:26.1	1:13	1:6

AERIAL APPLICATION

The use of aircraft specially equipped and capable of applying ULTRA LOW VOLUMES of **KONTROL 2-2** may be necessary. Such applications should be at the discretion of the Public Health Officials, Mosquito Abatement Districts or others trained in outdoor mosquito and biting fly programs to protect public health. Applications cannot exceed the recommended rates.

Aerial applications should be by suitable aerial ULV equipment capable of producing droplets with a MMD of 50 microns or less, with no more than 2.5% exceeding 100 micron. Application should be made at an altitude range of 120 to 175 feet (37 to 53 meters) with a swath width from 200 to 500 feet depending on the terrain and weather conditions. The recommended airspeed for fixed wing aircraft with flat fan nozzles is from 120 to 160 mph. For rotary wing aircraft equipped with rotary nozzles, apply at a sufficient airspeed to deliver that appropriate amount of a.i./acre (from 0.00175 to 0.007 lbs. a.i./acre).

PROHIBITION FOR AERIAL USE: Not for aerial application in Florida unless specifically authorized by the Bureau of Entomology and Pest Control, Florida Department of Agriculture and Consumer Services.

NOTICE: 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.

BUYER GUARANTEE LIMITED TO LABEL CLAIMS

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