MasterLine®

KONTROL 4 – 4
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 governmental 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-phenoxypyphenyl)methyl(+)Cl/trips 3-(2,2-dichloroethenyl) 2,2-Dimethyl cyclopropane carboxylate .................. 4.5%
Piperonyl Butoxide Technical Equivalent to 80% (butylcarbamyl)(6-propylipermoxyn) ether and 20% related compounds .................. 4.5%

INERT INGREDIENTS:
Contains a Petroleum Distillate Surfactant .......................... 90.0%

TOTAL ........................................................................... 100.0%

Contains 0.3344 pounds of Permethrin and 0.3344 pounds of Piperonyl Butoxide per gallon.

EPA Registration No. 73748-4

EPA Establishment No. 53883-TX-002

KEEP OUT OF REACH OF CHILDREN
CAUTION
See 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"

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
KONTROL 4 – 4
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 governmental 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-phenoxypyphenyl)methyl(1-)/cis/trans 3-(2,2-dichloroethyl)
2,2-Dimethyl cyclopropane carboxylate ........................................ 4.8%
Piperonyl Butoxide Technical
Equivalent to 80% (butylcarbaryl) (6-propylpiperonyl) ether and 20% related compounds ............. 4.0%

INERT INGREDIENTS: ................................................................. 90.8%
Contains a Petroleum Distillate Solvent
TOTAL ................................................................. 100.0%

Contains 0.3344 pounds of Permethrin and 0.3344 pounds of Piperonyl Butoxide per gallon.

EPA Registration No. 73748-4
EPA Establishment No. 53883-TX-002

KEEP OUT OF REACH OF CHILDREN
CAUTION
See Inside Booklet For Additional Precautionary Statements

"PRECAUCION AL USUARIO: Si usted no les ignora, no use este producto hasta que la etiqueta
haya sido explicado ampliamente"

Univar USA Inc.
9430 Research Blvd, Suite 350
Echelon Bldg IV
Austin, Texas 78759
**First Aid**

<table>
<thead>
<tr>
<th>Situation</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swallowed</td>
<td>Immediately call a poison control center or doctor. Do not induce vomiting.</td>
</tr>
<tr>
<td>Skin or Clothing</td>
<td>Take off contaminated clothing. Rinse skin immediately with plenty of water.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses.</td>
</tr>
<tr>
<td>Inhaled</td>
<td>Move person to fresh air. If person is not breathing, call 911 or an ambulance.</td>
</tr>
</tbody>
</table>

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO DOMESTIC ANIMALS AND HUMANS**

Cautions: Causes moderate eye irritation. Harmful if swallowed. Avoid contact with skin, eyes, or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse. Prolonged or frequent repeated skin contact may cause allergic reactions in some individuals.

**ENVIRONMENTAL HAZARDS**

This pesticide is extremely 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. 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 area, except when applications are made to prevent or control a threat to public health or personal safety. 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 rinse water or washwater.

**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. Note: 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.

**STORAGE AND DISPOSAL**

**Pesticide Storage and Spill Procedures:** Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spill or leak, soak up with an absorbent material such as sand, sawdust, earth, litter, 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 digging and flooding of permanent liquid bulk storage sites with an impermeable material.

**Pesticide Disposal:** Pesticide spray mixture or rinse that cannot be used according to label instructions must be disposed of according to Federal and local procedures under Subtitle C of the Resource Conservation and Recovery Act.
CONDITIONS AND RATES TO USE FOR MOSQUITO CONTROL

KONTROL 4-4 may be applied either diluted or undiluted as a thermal or non-thermal fog. Applications should wear long sleeved shirt, long pants, shoes and socks.

KONTROL 4-4 is recommended for application in 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, campgrounds, 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 an air temperature inversion is present. Applications during the cool hours of early morning or evening are preferable. Air temperatures should be greater than 60° F when conducting all types of applications. Application in calm air conditions is to be avoided. Apply only when ground wind speed is greater than 1 mph. Do not apply when wind speeds exceed 10 mph. Applications cannot exceed the recommended rates. Do not re-treat a site more than once in 10 days. Do not apply more than 0.18 lbs. of permethrin per acre per year to any site. 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.

KONTROL 4-4 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:

- Alfalfa
- Almonds
- Apples
- Artichoke, globe
- Asparagus
- Avocado
- Broccoli
- Brussels Sprouts
- Cabbage
- Cauliflower
- Celery
- Cherries
- Corn, popcorn
- Corn, sweet
- Eggplant
- Fidget
- Garlic
- Hange Grasses
- Horseradish
- Kiwi fruit
- Leafy Vegetables (except Brassica)
- Lettuce, head
- Mushrooms
- Onion, dry bulb
- Peaches
- Peas
- Pepper, bell
- Pitschis
- Potatoes
- Soybeans
- Spinach
- Tomatoes
- Vegetables, cucurbits
- Watercress

In the treatment of cornfields, feedlots, animal confinement houses, avian lots, poultry ranges and zoos, cover any exposed drinking water, drinking fountains and animal feed before application. Do not contaminate non-approved sites with spray drift.

GROUND APPLICATION INSTRUCTIONS (Thermal and Non-Thermal Application)

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 < 30 um) and that 80% of the spray is contained in droplets smaller than 48 microns (Dv 0.9 < 48 um). Directions from the equipment manufacturer or vendor, recaliber the nozzle. Any facility using a droplet-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to verify that pressure at the nozzle and nozzle flow rates(s) are properly calibrated.

THERMAL AEROSOL FOGGING

TRUCK MOUNTED: Apply diluted or undiluted with suitable Thermal Fogging equipment. Do not exceed the maximum a.i./acre rates. May be applied at speeds of 6 to 20 mph, treating a 300 ft. swath. To reduce oil requirement and sludge buildup in equipment, use a suitable mineral oil of 80-100 viscosity. For use with hand foggers, use the same a.i./acre rates and a swath width of 50 ft with a walking speed of 2 mph. Do not wet foliage since the oil based formulation may be phytotoxic. Do not fog when wind conditions exceed 10 miles per hour. Use well maintained and properly calibrated fogger.
Suggested Dilution Rates to Achieve 0.00175# a.i. per Acre

<table>
<thead>
<tr>
<th>MACHINE OUTPUT</th>
<th>DILUTION RATIO WITH FOG OIL 6 MPH</th>
<th>DILUTION RATIO WITH FOG OIL 10 MPH</th>
<th>MACHINE OUTPUT</th>
<th>DILUTION RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 gal/hr</td>
<td>1: 3.6</td>
<td>1:4:25</td>
<td>0.25 gal/hr</td>
<td>1: 1.2</td>
</tr>
<tr>
<td>20 gal/hr</td>
<td>1: 1.9</td>
<td>1: 9.5</td>
<td>0.50 gal/hr</td>
<td>1: 1.6</td>
</tr>
<tr>
<td>30 gal/hr</td>
<td>1: 1.4</td>
<td>1: 14.75</td>
<td>1.0 gal/hr</td>
<td>1: 1.4</td>
</tr>
</tbody>
</table>

NON-THERMAL AEROSOL (COLD FOG)

KONTROL 4-4 ULV Non-Thermal Aerosol (cold fog) Application: To control mosquitoes, midges and blackflies, apply KONTROL 4-4 using any standard ULV ground applicator capable of producing a non-thermal aerosol spray. Apply the product at a flow rate of 4.1 to 16.2 ounces per minute at an average vehicle speed of 10 mph. If different vehicle speeds are used, adjust the rate accordingly. These rates are equivalent to 0.00175 to 0.007 pounds of permethrin and the same amount of 0.00175 to 0.007 pounds of synergized pyrethryl butoxide per acre. Vary flow rates according 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. KONTROL 4-4 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 ULV table shown below. This table represents some suggested application rates for ground ULV applications. If an alternative dilution rate is used, adjust the flow rate accordingly.

Conditions and Rates to use KONTROL 4-4 Un splitted for Mosquito Control

<table>
<thead>
<tr>
<th>Permethrin/PBO</th>
<th>Application Rates/Fluid Ounces To Use Per Minute</th>
</tr>
</thead>
<tbody>
<tr>
<td>lbs. A.i./acre</td>
<td>6 mph</td>
</tr>
<tr>
<td>0.00570-0.007</td>
<td>8.1</td>
</tr>
<tr>
<td>0.00350-0.005</td>
<td>4.0</td>
</tr>
<tr>
<td>0.00175-0.003</td>
<td>2.0</td>
</tr>
</tbody>
</table>

AS A BARRIER SPRAY USING A MISTER TYPE UNIT

For use in non-thermal equipment, apply KONTROL 4-4 with a mister type nozzle to deliver droplets with a volume median diameter of 50 - 130μm. Use undiluted or diluted to achieve an application of 0.00175-0.007# a.i./acre. Use a 50 ft (15.2m) swath while walking at a speed of 2 mph (3.2 kph). If using a different speed, swath, or dilution, do not exceed the maximum a.i./acre. When this product is applied as a barrier treatment, do not apply within 100 feet (30 meters) of lakes and streams.

AERIAL APPLICATION INSTRUCTIONS

The use of aircraft specially equipped and capable of applying ULTRA LOW VOLUMES of KONTROL 4-4 may be necessary.

DROPLET SIZE CALIBRATION FOR AERIAL APPLICATION EQUIPMENT: Spray equipment must be adjusted so that the volume median diameter produced is less than 60 mils (0.0006 x 60 μm) and that 90% of the spray is contained in droplets smaller than 115 mils (0.00115 μm). The effect of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Calibration 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 correct that pressure at the nozzle and droplet flow rate(s) are properly calibrated.

Aerial application shall be made at altitudes ranging from 75 to 300 feet. Fixed wing aircraft with flat fan or rotary nozzles, or rotary wing aircraft equipped with rotary nozzles, apply at a sufficient droplet size to deliver the appropriate amount of a.i./acre (from 0.00175 to 0.007 # a.i./acre) and to achieve the appropriate droplet range. Apply only when ground wind speed is greater than 1 mph.

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

MasterLine® is a registered trademark of Univar USA.
KONTROL 4 - 4
For Mosquitoes, Flies and Gnats

PRECAUTIONARY STATEMENTS

HAZARDS TO DOMESTIC ANIMALS AND HUMANS
Caution: Causes moderate eye irritation. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

ENVIRONMENTAL HAZARDS
This pesticide is extremely toxic to aquatic organisms, including fish and aquatic invertebrates. Runoff from treated areas or disposal of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. 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 area, except when applications are made to prevent or control a threat to public health or to public health or vector control agencies on the basis of documented evidence or disease causing agents in vector mosquitoes or the occurrence of mosquito-borne diseases in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort. 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 rinseout or wastewaters.

PHYSICAL AND CHEMICAL HAZARDS
Do not use, pour, spill or store near heat or open flame. It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Note: 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.

DIRECTIONS FOR USE

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 drip disconnect cap, if applicable, and seal all openings which have been opened during use.

AGITATE BEFORE USE
Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. 
Storage: Store under cover in a cool, dry place. Store in original container. 
BULK STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Storage: Ground water contamination may be reduced by digging and filling of permanent liquid bulk storage sites with an impermeable material. 
Pesticide Disposal: Pesticide spray mixture or rinse 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. 

Univar USA Inc. 
9430 Research Blvd., Suite 350, Echelon Bldg IV, Austin, Texas 78759