

**DETHRINS/PIPERONYL BUTOXIDE CONCENTRATE 5%-25%**

Net wt 2.05-2.07 lbs (930-935 g) or 1.75-1.80 lbs (794-816 g) of professional use only

**PROFESSIONAL USE ONLY:**

Applied only by or under the supervision of State or Federal Health, Sanitation, or Pest Control Officials, or by State or Federal Health, Sanitation, or Pest Control Organizations and other organizations responsible for Insect Control Programs. Use as a contact or space application for the control of household and commercial insects to be controlled and the area to be treated may be applied through mechanical devices, broadcast systems as well as conventional fogging or spraying equipment.

**ACTIVE INGREDIENTS:**

DETHRINS	5% w/w
Piperonyl Butoxide, Technical	25%
Petroleum Distillate	70%
	<u>100% w/w</u>

Equivalent to 20% (active/total) 6-propanone-2-thiolethyl ether and to 5% relative humidity

**SPACE AND/OR CONTACT USE AREAS:**

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| <ul style="list-style-type: none"> <li>• Homes</li> <li>• Hotels</li> <li>• Restaurants</li> <li>• Schools</li> <li>• Stores</li> <li>• Offices</li> <li>• Public Buildings</li> <li>• Warehouses</li> <li>• Factories</li> <li>• Hospitals</li> <li>• Laboratories</li> <li>• Museums</li> <li>• Libraries</li> <li>• Parks</li> <li>• Zoos</li> <li>• Amusement Parks</li> <li>• Race Tracks</li> <li>• Airports</li> <li>• Seaports</li> <li>• Shipping Yards</li> <li>• Storage of products</li> <li>• Grain Elevators</li> <li>• Grain Processing Plants</li> <li>• Slaughterhouses</li> <li>• Processing Plants</li> <li>• Packing Houses</li> <li>• Cold Storage</li> <li>• Freezing Plants</li> <li>• Canning Plants</li> <li>• Food Processing Plants</li> <li>• Meat Processing Plants</li> <li>• Poultry Processing Plants</li> <li>• Fish Processing Plants</li> <li>• Dairy Processing Plants</li> <li>• Textile Mills</li> <li>• Paper Mills</li> <li>• Printing Plants</li> <li>• Book Binding Plants</li> <li>• Shoe Manufacturing Plants</li> <li>• Hat Manufacturing Plants</li> <li>• Fur Processing Plants</li> <li>• Leather Processing Plants</li> <li>• Tanneries</li> <li>• Hides</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> </ul> | <ul style="list-style-type: none"> <li>• Homes</li> <li>• Hotels</li> <li>• Restaurants</li> <li>• Schools</li> <li>• Stores</li> <li>• Offices</li> <li>• Public Buildings</li> <li>• Warehouses</li> <li>• Factories</li> <li>• Hospitals</li> <li>• Laboratories</li> <li>• Museums</li> <li>• Libraries</li> <li>• Parks</li> <li>• Zoos</li> <li>• Amusement Parks</li> <li>• Race Tracks</li> <li>• Airports</li> <li>• Seaports</li> <li>• Shipping Yards</li> <li>• Storage of products</li> <li>• Grain Elevators</li> <li>• Grain Processing Plants</li> <li>• Slaughterhouses</li> <li>• Processing Plants</li> <li>• Packing Houses</li> <li>• Cold Storage</li> <li>• Freezing Plants</li> <li>• Canning Plants</li> <li>• Food Processing Plants</li> <li>• Meat Processing Plants</li> <li>• Poultry Processing Plants</li> <li>• Fish Processing Plants</li> <li>• Dairy Processing Plants</li> <li>• Textile Mills</li> <li>• Paper Mills</li> <li>• Printing Plants</li> <li>• Book Binding Plants</li> <li>• Shoe Manufacturing Plants</li> <li>• Hat Manufacturing Plants</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> </ul> | <ul style="list-style-type: none"> <li>• Public Cars</li> <li>• Restaurants</li> <li>• Schools</li> <li>• Stored Food in multi-wa-</li> <li>• cased or bulk bags</li> <li>• Slaughterhouses</li> <li>• Swine Houses</li> <li>• Truck Trailers</li> <li>• Warehouses</li> <li>• Zoos</li> </ul> |
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**OUTDOOR USE AREAS:**

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| <ul style="list-style-type: none"> <li>• Parks</li> <li>• Zoos</li> <li>• Amusement Parks</li> <li>• Race Tracks</li> <li>• Airports</li> <li>• Seaports</li> <li>• Shipping Yards</li> <li>• Storage of products</li> <li>• Grain Elevators</li> <li>• Grain Processing Plants</li> <li>• Slaughterhouses</li> <li>• Processing Plants</li> <li>• Packing Houses</li> <li>• Cold Storage</li> <li>• Freezing Plants</li> <li>• Canning Plants</li> <li>• Food Processing Plants</li> <li>• Meat Processing Plants</li> <li>• Poultry Processing Plants</li> <li>• Fish Processing Plants</li> <li>• Dairy Processing Plants</li> <li>• Textile Mills</li> <li>• Paper Mills</li> <li>• Printing Plants</li> <li>• Book Binding Plants</li> <li>• Shoe Manufacturing Plants</li> <li>• Hat Manufacturing Plants</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> </ul> | <ul style="list-style-type: none"> <li>• Parks</li> <li>• Zoos</li> <li>• Amusement Parks</li> <li>• Race Tracks</li> <li>• Airports</li> <li>• Seaports</li> <li>• Shipping Yards</li> <li>• Storage of products</li> <li>• Grain Elevators</li> <li>• Grain Processing Plants</li> <li>• Slaughterhouses</li> <li>• Processing Plants</li> <li>• Packing Houses</li> <li>• Cold Storage</li> <li>• Freezing Plants</li> <li>• Canning Plants</li> <li>• Food Processing Plants</li> <li>• Meat Processing Plants</li> <li>• Poultry Processing Plants</li> <li>• Fish Processing Plants</li> <li>• Dairy Processing Plants</li> <li>• Textile Mills</li> <li>• Paper Mills</li> <li>• Printing Plants</li> <li>• Book Binding Plants</li> <li>• Shoe Manufacturing Plants</li> <li>• Hat Manufacturing Plants</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> <li>• Fur Processing Plants</li> <li>• Fur Dressing Plants</li> <li>• Fur Finishing Plants</li> <li>• Fur Storage</li> </ul> | <ul style="list-style-type: none"> <li>• Recreational Areas</li> <li>• Residences</li> <li>• Swine yards</li> <li>• Zoos</li> </ul> |
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**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**  
 SEE SIDE PANEL FOR ADDITIONAL  
 PRECAUTION STATEMENTS

Net Wt. No. 432-612      EPA Reg. 432-NJ-1      2-20017-P

REPRODUCED BY PENNICK CORPORATION

**PENICK** Penick Corporation  
 100 West Street West, Lyndhurst, NJ 07037 U.S.A.

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS & DOMESTIC  
ANIMALS  
CAUTION**

Harmful if swallowed. Food should be removed or covered during treatment. All food processing surfaces should be covered during treatment or thoroughly cleaned before use. When using the product in these areas, apply only when the facility is not in operation. Do not breathe spray mist. Wear mask or respirator of a type recommended by the U.S. Bureau of Mines to give adequate protection against this material. Wear protective clothing. Wash hands, arms and face with soap and water after handling and before eating or smoking. Wash all contaminated clothing with soap and water before re-use. Remove pets, birds and cover fish aquariums before spraying. When using in animal quarters, do not apply directly to food, water or food supplements. Wash teats of dairy animals before milking.

**STATEMENT OF PRACTICAL TREATMENT:**  
If swallowed: Do not induce vomiting. This product contains aromatic petroleum solvent. Aspiration may be a hazard. Call a physician at once. If in eyes or on skin: Flush with plenty of water for at least 15 minutes. Get medical attention if irritation persists.

**PHYSICAL & CHEMICAL HAZARDS:**  
Do not use or store near heat or open flame. **FLASH POINT MINIMUM: 150°F (65.5°C).**

**ENVIRONMENTAL HAZARDS:**  
This product is toxic to fish. Keep out of any body of water. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label. **NOTE:** This spray, when diluted properly as described and applied per the directions and cautions given, conforms with Food Additive Regulations 121.1074, 121.1075 and 121.1205 and the food additive tolerances established thereunder. When diluted with oil as specified on this label for use as an indoor space spray, this product may be applied in facilities operating under U.S.D.A. poultry, meat, rabbit and egg products inspection program.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. This product is effective in the control of the indicated insects if the applicator follows the directions for use as enumerated below:

- Argemone grain moths, Ants, Boxelder bugs, Crickets, Cheese mites, Cheese skippers, Cigarette beetles, Clover mites, Confused flour beetles, Dark mealworms, Deer flies, Dried fruit beetles, Drugstore beetles, Earwig, Fruit flies, Furcous gnats, Gnats, Grain moths, Granary weevil, Horn flies, Hornets, Horse flies, Houseflies, Indian meal moths, Lice, Mediterranean flour moths, Mosquitoes, Mottled mealworms, Red flour beetles, Rice weevils, Saw-toothed grain beetles, Small flying moths, Spider beetles, Stable flies, T. formicosa moths, Wasps, Yellow mealworms.

**DIRECTIONS FOR USE (Continued from side panel)**

**INDOOR USE AS A SPACE SPRAY, UNDILUTED**

Close windows and doors and shut off ventilating systems. Use a fogger or vaporizer adjusted to deliver an aerosol spray (no droplets over 50 microns in diameter and 85% less than 30 microns). Apply at a rate of 1/2 ounce per 1000 cu. ft. of space (14.79 ml per 28.3 cu. meters). Direct the spray toward the ceiling and upper corners of the area and behind obstructions. Keep the area closed for at least 15 minutes. Vacate the treated area and ventilate before reoccupying. Repeat treatment as necessary.

The above described application will kill accessible, exposed stages of flies (fruit, dining room flies), mosquitoes, small flying moths, gnats, wasps, hornets, clover mites, cheese mites, cheese skippers, boxelder bugs, earwigs, ants, and the following common stored product pests: granary weevils, rice weevil, confused flour beetles, saw-toothed grain beetles, dark mealworms, cigarette beetles, drugstore beetles, Argemone grain moths, Mediterranean flour moths, Indian meal moths, locoworms, yellow mealworms, dark mealworms, grain mites, earwigs, and red flour beetles.

**DRIED FRUIT PRODUCTS:** In storage or bins, processed for control of confused flour beetles, dried fruit beetles, Indian meal moths, saw-toothed grain beetles. Remove and destroy infested products. As noted above, dispense this product as a fine mist in the air above the trays and shelves. Do not apply to fruit directly. Use one ounce per 1000 cu. ft. of space (29.57 ml per 28.3 cu. meters). Repeat application at this dosage in any given month. Leave the room closed for 1 hour. Do not remain in treated areas and ventilate area before re-entry. This application will kill accessible, exposed stages of dried fruit beetles as well as those pests named above.

**STORED FOOD:** (Stored in multi-bagged bags or in cloth bags) in warehouses, storage rooms, flour mills, grain elevators, granaries, for control of Argemone grain moths, earwigs, confused flour beetles, Indian meal moths, Mediterranean flour moths, rice weevils, saw-toothed grain beetles, yellow mealworms, cheese mites, cheese skippers, cigarette beetles, grain mites, granary weevils, dark mealworms, red flour beetles. Remove and destroy infested products. As noted above, dispense this product, first directing spray under pallets, bittings as many insects as possible and then treat as a space spray. Infested stored products should be fumigated or treated by other effective methods using an approved product intended for this purpose. Use a dosage of 1 fl. oz. per 1000 cu. ft. of room space (29.57 ml per 28.3 cu. meters). Repeat applications as necessary for insect control. Leave the room closed for 1 hour. Do not remain in treated areas and ventilate area before re-entry. This application will kill accessible, exposed stages of those stored product pests listed above.

**INDOOR USE AS A SPACE SPRAY, DILUTED**

For use in conventional mechanical fogging equipment, to kill house flies, fruit flies, mosquitoes, small flying moths, and gnats: Cover or remove exposed food and food handling surfaces. Close room and shut off all air conditioning or ventilating equipment. Dilute 1 part of this product plus 49 parts of refined kerosene or a similar oil. Apply at the rate of 1-2 fl. ozs. per 1000 cu. ft. (29.57-59.15 ml. per 28.3 cu. meters), filling the room with mist. Keep area closed for at least 15 minutes. Vacate treated area and ventilate before reoccupying. Repeat treatment when reinfestation occurs. **SURFACE SPRAY:** To insure maximum control of crawling insects (ants, boxelder bugs, clover mites, drugstore beetles, earwig, lice, spider beetles) dilute 1 part of concentrate plus 49 parts of oil (refined kerosene) and mix well and apply as a coarse droplet spray using approximately 1 gallon to 750 sq. ft. of surface (3.79 liters to 56.63 sq. meters). Spray walls, floors, and other surfaces of bins and storage and handling areas thoroughly, being especially careful to treat cracks, crevices, and similar hiding places. Treat unloading, handling and processing areas, and inside conveying, processing and handling equipment.

Spray thoroughly around the base of heavy machinery and equipment. Spray insects directly when possible. For in-transit protection, clean and spray truck beds, boxcars, and ships' hold before loading. Thoroughly treat walls and floors and spray each layer of cartons or containers lightly as stated.

To control Indian meal moth and European meal moth in stored grain, apply to the surface of binned grain at a rate of 1 gal. per 1000 sq. ft. (3.79 liters per 92.9 sq. meters). Apply at monthly intervals with the first appearance of moths and continuing until early fall. In case of severe infestation, break up webbing with rate before spraying and make a second application in two weeks.

As an aid in the control of mites, gnats, wasps, and spiders, treat walls, ceilings, moldings, screens, door and window frames, beams, light cords, and similar resting places.

**ANIMAL QUARTER USE** (cattle pens, horse barns, poultry houses, swine herds, etc.): As a space spray diluted for use in conventional mechanical fogging equipment to kill houseflies, mosquitoes, small flying moths, and gnats. Dilute 1 part of concentrate plus 49 parts of oil (refined kerosene) and mix well. Apply at the rate of 2 fl. ozs. per 1000 cu. ft. of space (59.15 ml. per 28.3 cu. meters), above the animals. Direct spray towards the upper portions of the enclosure, filling the room with mist. Keep area closed for at least 15 minutes. Vacate treated area and ventilate before reoccupying. Repeat treatment when reinfestation occurs.

**IN MUSHROOM PRODUCTION AND PROCESSING:** To control mushroom flies or fungus gnats in growing houses, dilute 1 part of this product plus 49 parts of oil (refined kerosene) and mix well and apply at a rate of 1 oz. per 1000 cu. ft. (29.57 ml per 28.3 cu. meters) of space. Fogger should be operated 8-10 ft. (2.5-3 meters) away from beds and directed slightly upward over them. Circulating fans should be left in operation, but for best results, refrigeration should be turned off. In packing and canning plants, use at a rate of 1 oz. to 200 cu. ft. of space (29.57 ml to 56.63 cu. meters).

**OUTDOOR GROUND APPLICATION, UNDILUTED**

To control adult mosquitoes, gnats, and small flying moths. For best results, apply when there is a light breeze at approximately 5 miles per hour (8 kph). Apply from the windward side so fog will be carried across the area to be treated. Treat shrubbery and vegetation where mosquitoes may rest. Shrubbery and vegetation around structures, porches, patios and ponds may be treated. Application of this product to any body of water is prohibited. Repeat treatment as required.

Using truck-mounted equipment, the objective is to treat the area with 0.02 to 0.025 pounds (0.91-1.13 gm) of pyrethrins and 0.10 to 0.125 pounds (4.54-5.67 gm) of mineral kieselguhr per acre.

Falk's Pyrethrins 60 S and 70 S concentrate should be applied without further dilution. Dispense fog at the following flow rates depending upon the speed at which the truck is moving:

TRUCK SPEED	FLOW RATE OF CONCENTRATE
5 mph (8 kph)	2 to 2.25 fl. ozs./min. (59.15-65.4 ml/min)
10 mph (16 kph)	4 to 4.50 fl. ozs./min. (118.3-130.8 ml/min)

Delivery rate of truck-mounted equipment can be varied slightly so long as the basic objective of 0.02 to 0.025 pounds (0.91-1.13 gm) actual pyrethrins per acre is maintained. Use a speed of 10 to 15 mph for acreage calculations.

Directions For Use (continued)

BEST DOCUMENT AVAILABLE

BEST DOCUMENT AVAILABLE

### DIRECTIONS (Continued from back panel)

To control mosquito larvae, dilute at the rate of 9 oz. per 50 gals. of oil (338.17 ml per 189.27 liters) and apply at the rate of 20 to 25 gals. per acre (187.08 to 213.25 liters per hectare).

Apply as a coarse wetting spray to the border or on shallow water of wetlands, swamps and marshes where mosquito larvae are known to breed.

**TEMPORARY REDUCTION OF AVOIDANCE** from houseflies, mosquitoes and other flying insects outdoors. The aforementioned application for outdoor ground application will afford temporary reduction of avoidance from these pests in public gathering places, (drive-in restaurants, drive-in theaters, golf courses, municipalities, parks, playgrounds and recreational areas). Direct application into tall grass, shrubbery and around lawns where these pests may hover or rest, apply while air is still. Avoid wetting foliage. Application should be made prior to attendance. Repeat as necessary.

In additional gathering areas (corrals, feed lots, swine lots, and zoos), cover water, drinking fountains, and animal feed before use. Fill area with water directing application into tall grass, shrubbery and around lawns where these pests may hover or rest. Apply while air is still. Avoid wetting foliage. In zoos, avoid exposure of reptiles to the product. Repeat as necessary.

**FOR USE ON ANIMALS:** To protect beef and dairy cattle, horses, and dogs from house flies, houseflies, mosquitoes, and gnats, dilute 1 part of the concentrate plus 49 parts oil (refined kerosene) and mix well and apply until the animal is wet to the tips of the hair. To control stable flies, horse flies, and deer flies on beef and dairy cattle and horses, apply 2 oz. (56.15 ml) per adult animal, sufficient to wet the hair to the tips of the hair. Repeat treatment once or twice daily or at intervals to give continued protection. To control the mobile stages of blood sucking lice on beef and dairy cattle, apply the spray to thoroughly wet the hair. Use 2 oz. (56.15 ml) or less per animal and repeat every 2 to 3 weeks as required.

### STORAGE & DISPOSAL

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

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinse water that cannot be used according to label instructions must be disposed of according to applicable Federal, State, or Local procedures.

**CONTAINER DISPOSAL:** Puncture and dispose of in a sanitary landfill, or by other approved State and Local procedures.

### WARRANTY STATEMENT

Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of it or the results to be obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility for injury or damage resulting from its misuse or its combination with other materials.