



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

March 16, 2018

Rebecca Horton  
Consultant/Agent for  
Jesmond Holding AG  
c/o Registrations by Design, Inc.  
P.O. Box 1019  
Salem, VA 24153

Subject: Amended Reregistration Label/Label Amendment – Label with RED language included; revisions sent in response to 2014 Agency letter.  
Product Name: Bio-Kill Brand Insecticide  
EPA Registration Number: 64321-1  
Application Date: February 9, 2010; January 19, 2017  
Decision Numbers: 413342; 525719

Dear Ms. Horton:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable. The Agency, has also completed reviewing all of the information submitted with your application to support the reregistration of the above referenced product in connection with the Permethrin RED, and has concluded that your submission is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

NOTE: This product is **not** yet being reregistered under section 4(g) of FIFRA.

Please note that the record for this product currently contains the Confidential Statements of Formulation (CSFs) listed below. Any previously dated CSFs are superseded.

- Basic CSF, dated 05/10/2016
- Alternate CSF 1, dated 05/10/2016
- Alternate CSF 2, dated 01/19/2017

A copy of your label stamped “Accepted” is enclosed. This labeling supersedes all previously accepted labeling. Products shipped after 12 months from the date of this amendment or the next printing of the label, whichever occurs first, must bear the new revised label. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions about this letter, please contact Jennifer Gaines at 703-305-5967 or via email at [gaines.jennifer@epa.gov](mailto:gaines.jennifer@epa.gov).

Sincerely,



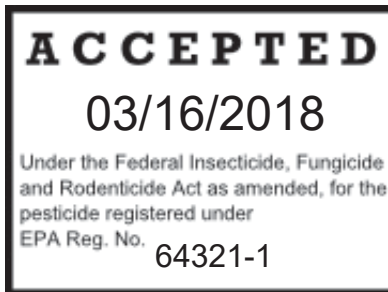
Elizabeth Fertich  
Product Manager 4  
Invertebrate & Vertebrate Branch 1  
Registration Division (7505P)  
Office of Pesticide Programs

Enclosure

{ } Note to EPA  
[ ] Optional language

{MASTER LABEL}

{FRONT PANEL}



## BIO KILL® brand INSECTICIDE

{Additional Brand Name(s): Multipurpose BioKill brand insecticide; Multi-Purpose BugBusters; BioKill brand insecticide Multi-purpose}

### ACTIVE INGREDIENT:

Permethrin..... 0.25%

OTHER INGREDIENTS:..... 99.75%  
100.00%

{NOTE TO EPA: Front panel of label may include graphics representing product use; e.g., listed insects}

**Keep Out of Reach of Children**  
**CAUTION**

{Note to EPA: Optional identification of label location given in brackets in following statement based on individual packaging requirements}

See [back] [side] panel(s) [& accompanying booklet] for First Aid and additional precautionary statements

NET CONTENTS \_\_\_\_\_

**{BACK/SIDE PANEL(S) &/OR BOOKLET, WHEN NECESSARY}**

**READ ENTIRE LABEL BEFORE EACH USE.**

**SHAKE BOTTLE WELL BEFORE USING**

**COMMERCIAL APPLICATIONS:**

For use in non-food areas indoors and outside premises of Hotels, Motels, Commercial buildings, Schools, Warehouses, Theaters, Office Buildings, Kennels, Apartments and Condominium buildings, and non-food contact areas of food-feed processing establishments.

Inside and outside landscaping

Kills bugs inside garbage bins, garbage dumpsters and in garbage chutes

Kills bugs in hallways, common areas and inside apartments, office units and public areas

**HOUSEHOLD APPLICATIONS:**

House plants and indoor landscape

Inside - along baseboards, on carpets, mattresses, around cupboards, etc.

Outside – in ornamental gardens, on ornamental flowers, and lawns.

**DOMESTIC ANIMALS:**

Dogs to kill fleas & ticks

Poultry to kill lice, fleas & ticks

**DO NOT USE ON CATS**

Livestock to kill horn flies, face flies, mosquitoes and gnats. **DO NOT APPLY DIRECTLY TO LIVESTOCK USED FOR FOOD OR FEED**

**PRECAUTIONARY STATEMENTS**

**Hazards to Domestic Animals**

**CAUTION**

**Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are gloves made of barrier laminate or butyl rubber  $\geq$  14 mils.

Mixers, loaders, applicators and other handlers must wear long-sleeve shirt and long pants; shoes plus socks; chemical-resistant gloves except for applicators using motorized ground equipment, pilots and flaggers; chemical-resistant apron for mixers/loaders, persons cleaning equipment, and persons exposed to the concentrate, and for handlers performing animal dip applications.

**User Safety Recommendations:**

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**User Safety Requirements:**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched (except as required by directions for use) or heavily contaminated with this product's concentrate. Do not reuse them.

Do not enter or allow worker entry into the treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry into treated areas is: coveralls, shoes plus socks, and chemical-resistant gloves  $\geq$  14 mils made of any waterproof material.

{NOTE TO EPA: When marketed for use on dogs, the following precautionary statement will be added to label:}

[CAUTION: Sensitivities may occur after using ANY pesticide product for dogs. If signs of sensitivity occur, bathe your dog with mild soap and rinse with large amounts of water. If signs continue, consult a veterinarian immediately.]

**{WHEN LABELED FOR OUTDOOR USE AS A *DILUTABLE PRODUCT* to be mixed with water}**

**[ENVIRONMENTAL HAZARDS**

This product is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. This pesticide is highly toxic to bees and other pollinating insects exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds when bees or other pollinating insects are foraging the treatment area.]

**{WHEN LABELED FOR OUTDOOR USE AS A *READY TO USE PRODUCT*}**

**[ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. This pesticide is highly toxic to bees and other pollinating insects 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 or other pollinating insects are foraging the treatment area.]

**DIRECTIONS FOR USE**

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

{Commercial/Industrial Use}

**Use Restrictions:** Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. Do not apply directly to sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur, except as directed by this label. Do not apply by cold or thermal foggers.

When applied as a surface spray, do not allow adults, children or pets to enter until sprays have dried. Do not apply as a broadcast treatment to indoor surfaces at residential sites, including nurseries, day care centers, schools, hospitals, and nursing homes. Do not use in hospitals when patients or staff are present.

When applied as a space spray, do not allow adults, children or pets to enter until vapors, mists and aerosols have dispersed and the treated area has been thoroughly ventilated. Do not use in outdoor residential misting systems.

When used in dairy barns or facilities, remove livestock before making applications, and close milk bulk tank lids to prevent contamination from spray and from dead or falling insects. Remove or cover milking utensils before application. Wash teats of animals before milking. Do not apply directly to livestock used for food or feed. In horse stables, do not apply to horses intended to be used for food or feed.

{Residential Use}

**Use Restrictions:** For use as a surface spray, do not allow adults, children or pets to enter until sprays have dried. Do not apply as a broadcast treatment to indoor surfaces at residential sites, including nurseries, day care centers, schools, hospitals, and nursing homes. For outdoor application, use in a handheld cold or thermal fogger is prohibited. Do not make applications during rain. Do not water the treated area to the point of runoff. Not for use in outdoor residential misting systems. In horse stables, do not apply to horses intended to be used for food or feed.

FOR USE IN NON-FOOD AREAS INDOORS AND OUTSIDE PREMISES OF HOTELS, MOTELS, HOMES, SCHOOLS, PRESCHOOLS, NURSERIES, DAY CAMPS, GREENHOUSES, LATHHOUSES, SEED HOUSES, FOOD HANDLING ESTABLISHMENTS, PACKAGING AND PROCESSING PLANTS, BREWERIES; COMMERCIAL, INDUSTRIAL, OFFICE, INSTITUTIONAL AND STORAGE BUILDINGS; DAIRIES, MILK STORAGE ROOMS, EGG PROCESSING PLANTS, STORES, GROCERY STORES/SUPERMARKETS, RESTAURANTS, BOTTLING PLANTS, CANNERIES, FLOWER AND FEED MILLS, BAKERIES, WAREHOUSES, PORTABLE TOILETS, AND IN HOSPITALS. ALSO FOR USE IN CAMPERS, MOBILE HOMES, BUSES, AUTOMOBILES, TRUCKS, BOXCARS, MARINAS, BOATS AND SHIPS. ALSO FOR USE IN DOG KENNELS AND HORSE STABLES.

## INDOOR APPLICATIONS

**Use Restrictions:** Do not apply when food is present. Do not use in food/feed areas of food/feed handling establishments, restaurants or other areas where food/feed is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms, but excluding areas where foods may be prepared or held. The product may be used in non-food/feed areas of food/feed establishments such as garbage rooms, lavatories, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage areas (after canning or bottling). In the home, cover all food processing surfaces and utensils during treatment or thoroughly wash before use. Cover or remove exposed food. Not For Use In Federally Inspected Meat and Poultry Plants. Do not apply to classrooms while in use. Except when applying to dogs or livestock, do not enter or allow others to enter until sprays have dried. Do not apply directly to livestock used for food or feed. Do not apply as a broadcast treatment to indoor surfaces at residential sites, including nurseries, day care centers, schools, hospitals, and nursing homes.

**Surface Spraying:** Kills crawling and flying household insect pests for up to 4 weeks. Not for broadcast use.

To kill *ants, boxelder bugs, brown dog ticks, cadelles, centipedes, cheese mites, cluster flies, clover mites, cockroaches, crickets, earwigs, fire ants, flying moths, fruit flies, gnats, grasshoppers, house flies, Lone star ticks, mealworms, millipedes, mosquitoes, palmetto bugs, rice weevils, scorpions, silverfish (firebrats), sowbugs (pillbugs), spider beetles, spiders and waterbugs*: Direct the spray into hiding places, cracks and crevices, behind shelves and drawers, moist areas, openings around pipes and sinks, under refrigerators. Spray directly into and around floor drains. For silverfish, spray bookcases. For Ants, spray trails, nests and points of entry.

To kill *carpet beetles*: Apply as a spot treatment only. Hold container 14-18 inches from carpet. Apply spray evenly, covering until slightly moist. Avoid wetting or soaking. Spray underside of carpet when

possible. Also spray floor and along baseboards, cracks and crevices wherever these insects are seen or suspected.

To kill **bedbugs**: Spray mattresses lightly, particularly around tufts and seams. Take beds apart and spray in all joints. Allow all sprayed articles to dry thoroughly before use.

To kill **fleas** (adult and larvae) and **ticks** (adult and nymphs): Apply as a spot treatment only. Remove and thoroughly clean or destroy pet bedding. Spray pet sleeping quarters, beds, floor and floor covering (e.g., rugs and carpeting) with special attention to cracks and crevices around baseboards, and window and door frames. Infested upholstered furniture may also be treated with this product. Make a test application to upholstery or drapery fabrics in an inconspicuous place before use. Allow to dry thoroughly before allowing pets to contact treated areas.

To kill **clothes moths**: Remove and brush thoroughly any infested articles from storage and air for several hours in sunlight, if possible. Apply spray liberally to empty chests, closets, bureaus and other storage areas directing the spray into cracks, joints and crevices. After airing, infested articles may be treated lightly by keeping nozzle at least 3 feet from fabric to avoid possible staining. Allow all sprayed articles to dry thoroughly before use.

To kill **lice** and **louse eggs**: Treat only those garments and parts of bedding, including mattresses and furniture that cannot be either laundered or dry cleaned. Spray in an inconspicuous area to test for possible staining or discoloration. Inspect again after drying, then proceed to spray entire area to be treated. Spray from a distance of 8 to 10 inches. Allow all treated articles to dry thoroughly before use.

**Grain Insects:** To kill *confused flour beetles, saw-toothed grain beetles, spider beetles, shiny spider beetles, grain mites, red flour beetles, angoumois grain moths, grain weevils, Indian meal moths, Mediterranean flour moths, lesser grain borers, cigarette beetles, drug store beetles, chocolate moths and carpet beetles* remove infested grain, cereal or flour and destroy. Remove other food and foodstuffs in the area before spraying. Spray directly on exposed stages and into cracks and crevices where grain insects may be hiding. In homes, dispose of all infested products. Clean shelves and drawers thoroughly before applying product. Wash any utensils that are contacted with spray before reusing. Repeat as necessary.

#### **OUTDOOR APPLICATIONS:**

All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Treatment to soil or vegetation around structures;
- (2) Applications to lawns, turf and other vegetation;
- (3) Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

**Garden Insects:** For use on roses, dahlias, asters, carnations, chrysanthemums and other ornamentals to kill *Japanese beetles* as well as *whiteflies, aphids, lace bugs, ants, exposed thrips, spiders, red mites and leafminers*. May be used on plants in small gardens as a multi-purpose spray and for spot treatments of incipient insect infestations to prevent spreading into larger garden areas.

When spraying plants, do not hold nozzle closer than 18 inches. Use a sweeping motion. Be cautious about wetting tender foliage, young plants and new growth. Do not spray plants when temperature exceeds 90°F. Contact insects directly whenever possible. Repeat treatment as infestations occur.

**Listed Nuisance Insect Pests:** 1 gallon **BIO KILL® brand INSECTICIDE** treats 800 linear feet with a 6-inch band. [16 fl. oz. **BIO KILL® brand INSECTICIDE** treats 100 linear feet with a 6-inch band.]

**Outside Surfaces of Buildings:** To kill *ants, clover mites, crickets, earwigs, millipedes,*

**sowbugs (pillbugs).** To help prevent infestations, spray the building foundation to a height of 2-3 feet where insects are active and may find entrance. Apply as a residual spray to porches, screens, window frames, eaves, patios, garages, refuse dumps and other outside building areas where these pests congregate or are seen. Repeat treatment as needed to maintain effectiveness. To aid in reducing annoyance from **cluster flies, flying moths, gnats, house flies** and **mosquitoes**, spray outside surfaces of screens, doors, window frames or wherever these insects may enter. Treat surfaces around light fixtures on porches, in garages and other places where these insects gather. Repeat as necessary.

**Other Outdoor Areas:** To kill **crickets, earwigs** and **fleas** thoroughly spray infested areas of weeds or brushy non-crop areas. For **ants** thoroughly wet hills and runways. Repeat application as reinfestations occur.

**Wasps, Hornets, Yellow Jackets:** Application should be made in the late evening when insects are at rest. Spray liberally into hiding and breeding places, including nest openings in ground, bushes, under attic rafters and other cracks and crevices which may harbor pests. Saturate nest openings and contact as many insects as possible. Repeat as necessary.

**Fire Ants:** Apply 1 gallon of **BIO KILL® brand INSECTICIDE** as a gentle rain to each fire ant mound using a sprinkler can.

Thoroughly wet the mound and surrounding area to a 4 foot diameter (1.22 m). For best results apply in cool weather, 65°-80° F (18.5-27°C), or in early morning or late evening hours. Treat new mounds as they appear. Do not disturb the mound prior to treatment. If possible, treat all mounds in the vicinity, and treat all colonies which may not as yet have constructed a mound.

**Ticks (including ticks which may carry lyme disease):** Apply as a residual treatment to kill **Deer tick (Ixodes dammiei), Lone Star tick (Amblyomma americanum), Brown dog tick (Rhipicephalus sanguineus), American dog tick (Dermacentor variabilis)** and **Western black-legged tick (Ixodes pacificus)**. Apply until surface is wet (approximately 1 gal/750-1000 ft.) [(approximately 16 fl. oz./94-125 ft.)] Treat around windows and doors, porches, screens, eaves, patios, garages, under stairways and in crawl spaces where these pests may enter. Treat a band of vegetation and leaf litter 6-10 feet wide around the outside of buildings to kill ticks occurring there. To kill ticks in outdoor activity areas, treat a band of vegetation and leaf litter 6-10 feet wide and adjacent to activity areas, especially where dense vegetation occurs.

## **DO NOT USE ON CATS**

**ON DOGS: USE ONLY ON DOGS & PUPPIES GREATER THAN 12 WEEKS OLD.** Consult a veterinarian before using this product on debilitated, aged, pregnant, nursing, or medicated dogs.

To kill **fleas, ticks and lice:** Start spraying at the tail, moving the sprayer rapidly and making sure that the dog's body is covered, including the legs and underbody. While spraying fluff the hair so that the spray will penetrate to the skin. Make sure spray wets thoroughly. Do not spray into eyes or face. Avoid contact with genitalia. Repeat every three weeks. **As a dip for dogs:** Using one part product and three parts water, make up enough material to thoroughly soak dog. Wet dog with water before treatment. Sponge, dip or pour diluted product on the dog until fur and skin are thoroughly wet, making sure that the dog's entire body is treated, including the legs and underbody. Do not treat dog's face.

## **ON LIVESTOCK:**

### **DO NOT APPLY DIRECTLY TO LIVESTOCK USED FOR FOOD OR FEED.**

To protect cattle, goats, sheep and horses from **horn flies, face flies, mosquitoes and gnats:** Apply a light mist sufficient to wet the surface of the hair. For face flies, spray face and head, but do not spray into eyes. When used in dairy barns or facilities: Close milk bulk tank lids to prevent contamination from spray and dead or falling insects. Remove or cover milking utensils before application. Wash teats of



animals before milking. In horse stables, do not apply to horses intended to be used for food or feed.

To kill *stable flies, horse flies and deer flies*: Apply at a rate of 2 ounces per adult animal, sufficient to wet the hair thoroughly. Repeat treatment daily or at intervals necessary to give protection.

To kill *blood-sucking lice*: Apply to infested area of the animal using a stiff brush to get the spray to the base of the hair. Repeat every 3 weeks if required.

To kill above listed insects and reduce annoyance to livestock, remove animals and thoroughly spray barn walls, stalls and surfaces where these pests may alight or congregate.

To kill *poultry lice*: Spray roosts, walls and nests or cages thoroughly. Follow by spraying over the bird with a fine mist.

To kill *bedbugs and mites in poultry houses*: Spray crevices of roost poles, cracks in walls and cracks in nests where the bedbugs and mites hide.

To kill *flies, mosquitoes and gnats* in barns, milk rooms, dairy plants, slaughter and poultry houses: Apply as a fog or fine mist, directing spray toward the ceiling and upper corners of the room until the area is filled with mist, using 1 oz. of **BIO KILL® brand INSECTICIDE** in 2 quarts of water to cover 1,000 cubic feet of space. For best results, close windows and doors before spraying and keep closed for 10 to 15 minutes. Vacate the area and ventilate before re-occupying. Repeat application as necessary.

### **APPLICATION INSTRUCTIONS AS A *DILUTABLE PRODUCT*** **FOR USE ON INDOOR AND OUTDOOR PLANTS:**

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior landscapes, ornamental gardens or lawns and grounds.

Note: Do not use more **BIO KILL® brand INSECTICIDE** than labeled, as this may cause some plant injury. Use this dilution unless otherwise specified. Use with care on ferns, palms and fuchsia. As with all plants listed on this label, especially carnations, chrysanthemums and roses, there exists a wide variety of species and cultivars and, therefore, a wide variety of susceptibility to injury. To ascertain possible phytotoxicity, spray a few listed plants, wait 24 hours, and check for possible injury.

**CONTACT & RESIDUAL SPRAY** - Apply as a thorough coverage spray, wetting leaves and branches to run-off. Use sufficient spray to penetrate dense foliage. Adjust spray volume used to plant size.

**Indoor Application:** Mix 8 oz (1 cup) of **BIO KILL® brand INSECTICIDE 0.25%** with 1 gallon of water [2 oz. (4 Tbs) of **BIO KILL® brand INSECTICIDE** with 1 quart of water]. If application is to be made indoors, remove infested plants from living areas prior to application. Spray plants in an area not likely to be occupied by children or pets (particularly fish). When leaves dry, plants can be returned to original location. Do not enter or allow others to enter until sprays have dried.

To protect plants in indoor landscaping, spray directly on insects to kill *leafrollers, armyworms, cutworms* and *cabbageworms* on Chrysanthemums; *fungus gnats* on Velvet plants. Spray as directed above to kill *aphids, armyworms, corn earworms, fall cankerworms, inchworms, Japanese beetles, leafminers, leafrollers, mealybugs, scale, spider mites, spring cankerworms, exposed thrips* and *whiteflies* on the following: Ageratum, Ardisia, Aster, Azalea, Baby's breath, Begonia, Birdsnest fern, Bleeding heart, Carnation, Chrysanthemum, Coleus, Crown of thorns, Cockscomb, Cyclamen, Dracaena, Dumbcane, English ivy, Fuchsia, Gladiolus, Grape ivy, Hypoestes Ivy, Juniper, Lily, Marigold, Orchid, Palm, Pansy, Peperomia, Petunia, Philodendron, Piggy-back plant, Poinsettia, Portulaca, Pothos, Prayer plant, Purple passion, Rabbits foot fern, Rose, Schefflera, Snapdragon, Snake plant, Statice, Velvet plant, Verbena, Zinnia.

**Outdoor Application:** All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Treatment to soil or vegetation around structures;
- (2) Applications to lawns, turf and other vegetation;
- (3) Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

Mix 8 oz (1 cup) of **BIO KILL® brand INSECTICIDE** with 1 gallon of water [2 oz. (4 Tbs) of **BIO KILL® brand INSECTICIDE** with 1 quart of water]. Spray in the late afternoon or evening when temperature ranges from 50°F to 78°F, and when there is little or no wind. Spray at the first sign of insect pests. On those plants that will flower during the season, the spray schedule should be completed before blossom formation. Repeat as necessary; use intervals of 4 to 8 days. **BIO KILL® brand INSECTICIDE** application can be made up to the day of collection. Repeat applications may be necessary to kill citrus blackflies on non-bearing citrus; adult Japanese beetles on roses.

### **Garden Insects**

**Roses & Flowers:** Spray to kill *aphids, cicadas, corn earworms, fall cankerworms, fall webworms, inchworms, leafminers, leafrollers, mealybugs, bagworms, spider mites, exposed thrips and whiteflies* on the following: Ageratum, Aster, Azalea, Begonia, Coleus, Common ninebark, Common snowberry, Exacum, Gladiolus, Gold bells, Hypoestes, Ivy, Lilac, Marigold, Mock orange, Nannyberry, Orchid, Pansy, Pea shrub, Petunia, Poinsettia, Rhododendron, Rose, Snapdragon, Wax plants, Zinnia.

**Trees & Shrubs:** Use sufficient spray to obtain full coverage of all foliage. Avoid heavy wetting. Use to kill *aphids, bagworms, cicadas, exposed thrips, fall cankerworms, inchworms, leafminers, leaf rollers, mealybugs, spider mites* and *whiteflies* on the following: Arizona cypress, Birch, non-bearing Cherry, non-bearing Citrus, Conifers, Elm, Euonymous, English ivy, Fir, Honeysuckle, Oak, Palm, Philodendron, Pine, Taxus, Tulip Poplar and Weeping fig. Use to kill *pine moths, pine needleminers, pine beetles and needle scales* on Pine; *budworms* on Conifers; *oakworms* on Oak; *fall webworms* on Cherry, Elm and Honeysuckle; *citrus black flies* on non-bearing citrus; *tussock moths* on Douglas and grand firs; *leafminers* on Birch; *elm leaf beetle and elm spanworms* on Elms. To kill *tent caterpillars*: Application should be made when caterpillars are young and tents are first noticed. For best results, apply in late afternoon or evening, when caterpillars have returned to their tents. Apply **BIO KILL® brand INSECTICIDE FULL STRENGTH**. Wet tents with spray on all sides. A few caterpillars may be seen escaping from the tent; however, they should die within several hours.

**LAWNS:** For *armyworms* mix 4½ oz. in 1 gal. of water and use 10 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft. For *brown dog ticks, chinch bugs, cutworms, fleas, Japanese beetle grubs, mole crickets* and *sod webworms* mix 1 oz. in 1 gal. of water. Use 10 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft. To kill *ants (including fire ants), crickets* and *grasshoppers* mix 6.4 oz. in 1 gal. of water. Use 3 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft.

Thoroughly wet down grass a few hours before applying. Lawns should be no taller than 3 inches at time of application. Slightly more water may be used as long as the amount of product per area is as listed above. For heavy infestations, repeat application after 2 weeks. Also for kill of *cutworms on dichondra and Irish moss*. Use as directed above for lawns.

{COMMERCIAL/INDUSTRIAL USE}

### Storage & Disposal

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

**Pesticide Storage and Spill Procedures:** Keep from freezing. 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.

{CONTAINERS ONE GALLON AND SMALLER}

**Pesticide Disposal: *If partly filled*** - Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain

**Container Handling: *If empty*** – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

{CONTAINERS LARGER THAN ONE GALLON}

**Pesticide Disposal:** Pesticide or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

**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.

{RESIDENTIAL USE}

### Storage & Disposal

**Pesticide Storage:** Keep from freezing. Store upright at room temperature, out of reach of children and pets.

**Pesticide Disposal: *If partly filled*** - Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain

**Container Handling: *If empty*** – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

**NOTICE:** To the extent consistent with applicable law, buyer assumes all risks of use, storage of handling of this product not in strict accordance with directions given herewith.

Jesmond Holding Ag, Chollertrasse 35, CH 6301, Zug, Switzerland

{Lot no. to be added at production.}

{VERSION A: COMMERCIAL/INDUSTRIAL USE}

{FRONT PANEL}

## BIO KILL® brand INSECTICIDE

### {Optional Statements}

[For commercial use

Makes up to 16 gallons

Water-based Permethrin insecticide

Odorless in application.

For use INDOORS on houseplants and in indoor landscaping

A READY-TO-USE and DILUTABLE Permethrin-based emulsion insecticide

Dilutable for use on plants

For use OUTDOORS on ornamental trees, shrubs and flowers, on lawns.

For use outdoors, in homes and non-food areas of food/feed processing establishments, hotels, motels, commercial buildings, schools, warehouses, theaters, office buildings and kennels

Will not stain water-safe fabrics and surfaces

For use indoors and outdoors on a wide variety of listed crawling and flying insects

Use on DOGS to kill fleas and ticks

Can be used as a DIP for fleas on DOGS

Use on Poultry to kill lice and mites

Provides effective broad-spectrum kill of listed building and ornamental garden insect pests

Effective for up to four weeks

Multipurpose, ready-to-use, water based bug killer

Non-flammable

Easy to use - just spray affected areas

Use indoors and outdoors - broad spectrum insecticide includes: cockroaches, mosquitoes, ants, spiders, flies, moths, fleas, lice, bedbugs, crickets, grasshoppers and many, many other listed species

No odor - Non-staining - No sticky residue

Odorless and Multi-purpose Insecticide

Long lasting - residual effect up to 4 weeks

Sold in over 30 countries

Ready-to-use, water-based bug killer

Kills listed *crawling* insects, including cockroaches, ants, fire ants, fleas, spiders, ticks, lice, silverfish, earwigs, beetles, bedbugs, crickets and more!

Kills listed *flying* insects, including flies, moths, mosquitoes, gnats, hornets, wasps, black flies and more!

Rx for bugs.

For Bedding & Furniture

NOT FOR USE ON HUMANS

Observe all precautionary statements and follow directions for use carefully.

Household insects: cockroaches, fleas, bed bugs, and others listed.

Household plants and indoor landscaping

Spray for dogs to eliminate fleas, ticks and lice]

### ACTIVE INGREDIENT:

Permethrin ..... 0.25%

OTHER INGREDIENTS: ..... 99.75%

100.00%

{NOTE TO EPA: Front panel of label may include graphics representing product use; e.g., listed insects}

**Keep Out of Reach of Children**

**CAUTION**

See [back] [side] panel(s) [& accompanying booklet] for First Aid and additional precautionary statements

**NET CONTENTS** \_\_\_\_\_

**{BACK/SIDE/OTHER PANEL(S) &/OR BOOKLET, WHEN NECESSARY}**

**READ ENTIRE LABEL BEFORE EACH USE.**

**SHAKE BOTTLE WELL BEFORE USING**

**COMMERCIAL APPLICATIONS:**

For use in non-food areas indoors and outside premises of Hotels, Motels, Commercial buildings, Schools, Warehouses, Theaters, Office Buildings, Kennels, Apartments and Condominium buildings, and non-food contact areas of food-feed processing establishments.

Inside and outside landscaping

Kills bugs inside garbage bins, garbage dumpsters and in garbage chutes

Kills bugs in hallways, common areas and inside apartments, office units and public areas

House plants and indoor landscape

Inside - along baseboards, in carpets, mattresses, around cupboards, etc.

Outside – in ornamental gardens, on ornamental flowers, and lawns

**DOMESTIC ANIMALS:**

Dogs to kill fleas & ticks

Poultry to kill lice, fleas & ticks

**DO NOT USE ON CATS**

Livestock to kill horn flies, face flies, mosquitoes and gnats. **DO NOT APPLY DIRECTLY TO LIVESTOCK USED FOR FOOD OR FEED**

**PRECAUTIONARY STATEMENTS**

**Hazards to Domestic Animals**

**CAUTION**

**Personal Protective Equipment (PPE)**

Some materials that are chemical-resistant to this product are gloves made of barrier laminate or butyl rubber  $\geq$  14 mils.

Mixers, loaders, applicators and other handlers must wear long-sleeve shirt and long pants; shoes plus socks; chemical-resistant gloves except for applicators using motorized ground equipment, pilots and flaggers; chemical-resistant apron for mixers/loaders, persons cleaning equipment, and persons exposed to the concentrate, and for handlers performing animal dip applications.

**User Safety Recommendations:**

User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Do not enter or allow worker entry into the treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry into treated areas is: coveralls, shoes plus socks, and chemical-resistant gloves  $\geq$  14 mils made of any waterproof material.

**{NOTE TO EPA:** When marketed for use on dogs, the following precautionary statement will be added to label:}

**[CAUTION:** Sensitivities may occur after using ANY pesticide product for dogs. If signs of sensitivity occur, bathe your dog with mild soap and rinse with large amounts of water. If signs continue, consult a veterinarian immediately.]

**{WHEN LABELED FOR OUTDOOR USE AS A *DILUTABLE PRODUCT* to be mixed with water}**

**[ENVIRONMENTAL HAZARDS**

This product is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. This pesticide is highly toxic to bees and other pollinating insects exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds when bees or other pollinating insects are foraging the treatment area.]

**{WHEN LABELED FOR OUTDOOR USE AS A *READY TO USE PRODUCT*}**

**[ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. This pesticide is highly toxic to bees and other pollinating insects 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 or other pollinating insects are foraging the treatment area.]

**DIRECTIONS FOR USE**

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

**Use Restrictions:** Do not apply this product in a way that will contact workers or other persons either directly or through drift. Only protected handlers may be in the area during application. Do not apply directly to sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur, except as directed by this label. Do not apply by cold or thermal foggers.

When applied as a surface spray, do not allow adults, children or pets to enter until sprays have dried. Do not apply as a broadcast treatment to indoor surfaces at residential sites, including nurseries, day care centers, schools, hospitals, and nursing homes.

When applied as a space spray, do not allow adults, children or pets to enter until vapors, mists and aerosols have dispersed and the treated area has been thoroughly ventilated. Do not use in outdoor residential misting systems.

When used in dairy barns or facilities, remove livestock before making applications, and close milk bulk tank lids to prevent contamination from spray and from dead or falling insects. Remove or cover milking utensils before application. Wash teats of animals before milking. Do not apply directly to livestock used for food or feed. In horse stables, do not apply to horses intended to be used for food or feed.

FOR USE IN NON-FOOD AREAS INDOORS AND OUTSIDE PREMISES OF HOTELS, MOTELS, HOMES, SCHOOLS, PRESCHOOLS, NURSERIES, DAY CAMPS, GREENHOUSES, LATHHOUSES, SEED HOUSES, FOOD HANDLING ESTABLISHMENTS, PACKAGING AND PROCESSING PLANTS, BREWERIES; COMMERCIAL, INDUSTRIAL, OFFICE, INSTITUTIONAL AND STORAGE BUILDINGS; DAIRIES, MILK STORAGE ROOMS, EGG PROCESSING PLANTS,

STORES, GROCERY STORES/SUPERMARKETS, RESTAURANTS, BOTTLING PLANTS, CANNERIES, FLOWER AND FEED MILLS, BAKERIES, WAREHOUSES, PORTABLE TOILETS, AND IN HOSPITALS. ALSO FOR USE IN CAMPER, MOBILE HOMES, BUSES, AUTOMOBILES, TRUCKS, BOXCARS, MARINAS, BOATS AND SHIPS. ALSO FOR USE IN DOG KENNELS AND HORSE STABLES.

#### **INDOOR APPLICATIONS:**

Use Restrictions: Do not apply when food is present. Do not use in food/feed areas of food/feed handling establishments, restaurants or other areas where food/feed is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation. Serving areas are areas where prepared foods are served such as dining rooms, but excluding areas where foods may be prepared or held. The product may be used in non-food/feed areas of food/feed establishments such as garbage rooms, lavatories, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage areas (after canning or bottling). In the home, cover all food processing surfaces and utensils during treatment or thoroughly wash before use. Cover or remove exposed food. Not For Use In Federally Inspected Meat and Poultry Plants. Do not apply to classrooms while in use. Except when applying to dogs or livestock, do not enter or allow others to enter until sprays have dried. Do not apply directly to livestock used for food or feed. Do not apply as a broadcast treatment to indoor surfaces at residential sites, including nurseries, day care centers, schools, hospitals, and nursing homes.

**Surface Spraying:** Kills crawling and flying household insect pests for up to 4 weeks. Not for broadcast use.

To kill *ants, boxelder bugs, brown dog ticks, cadelles, centipedes, cheese mites, cluster flies, clover mites, cockroaches, crickets, earwigs, fire ants, flying moths, fruit flies, gnats, grasshoppers, house flies, Lone star ticks, mealworms, millipedes, mosquitoes, palmetto bugs, rice weevils, scorpions, silverfish (firebrats), sowbugs (pillbugs), spider beetles, spiders and waterbugs*: Direct the spray into hiding places, cracks and crevices, behind shelves and drawers, moist areas, openings around pipes and sinks, under refrigerators. Spray directly into and around floor drains. For silverfish, spray bookcases. For Ants, spray trails, nests and points of entry.

To kill *carpet beetles*: Apply as a spot treatment only. Hold container 14-18 inches from carpet. Apply spray evenly, covering until slightly moist. Avoid wetting or soaking. Spray underside of carpet when possible. Also spray floor and along baseboards, cracks and crevices wherever these insects are seen or suspected.

To kill *bedbugs*: Spray mattresses lightly, particularly around tufts and seams. Take beds apart and spray in all joints. Allow all sprayed articles to dry thoroughly before use.

To kill *fleas* (adult and larvae) and *ticks* (adult and nymphs): Apply as a spot treatment only. Remove and thoroughly clean or destroy pet bedding. Spray pet sleeping quarters, beds, floor and floor covering (e.g., rugs and carpeting) with special attention to cracks and crevices around baseboards, and window and door frames. Infested upholstered furniture may also be treated with this product. Make a test application to upholstery or drapery fabrics in an inconspicuous place before use. Allow to dry thoroughly before allowing pets to contact treated areas.

To kill *clothes moths*: Remove and brush thoroughly any infested articles from storage and air for several hours in sunlight, if possible. Apply spray liberally to empty chests, closets, bureaus and other storage areas directing the spray into cracks, joints and crevices. After airing, infested articles may be treated lightly by keeping nozzle at least 3 feet from fabric to avoid possible staining. Allow all sprayed articles to dry thoroughly before use.

To kill *lice* and *louse eggs*: Treat only those garments and parts of bedding, including mattresses and furniture that cannot be either laundered or dry cleaned. Spray in an inconspicuous area to test for possible staining or discoloration. Inspect again after drying, then proceed to spray entire area to be treated. Spray from a distance of 8 to 10 inches. Allow all treated articles to dry thoroughly before use.



**Grain Insects:** To kill *confused flour beetles, saw-toothed grain beetles, spider beetles, shiny spider beetles, grain mites, red flour beetles, angoumois grain moths, grain weevils, Indian meal moths, Mediterranean flour moths, lesser grain borers, cigarette beetles, drug store beetles, chocolate moths and carpet beetles* remove infested grain, cereal or flour and destroy. Remove other food and foodstuffs in the area before spraying. Spray directly on exposed stages and into cracks and crevices where grain insects may be hiding. In homes, dispose of all infested products. Clean shelves and drawers thoroughly before applying product. Wash any utensils that are contacted with spray before reusing. Repeat as necessary.

#### **OUTDOOR APPLICATIONS:**

All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Treatment to soil or vegetation around structures;
- (2) Applications to lawns, turf and other vegetation;
- (3) Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

**Garden Insects:** For use on roses, dahlias, asters and other ornamentals to kill *Japanese beetles* as well as *whiteflies, aphids, lace bugs, ants, exposed thrips, spiders, red mites and leafminers*. May be used on plants in small gardens as a multi-purpose spray and for spot treatments of incipient insect infestations to prevent spreading into larger garden areas.

When spraying plants, do not hold nozzle closer than 18 inches. Use a sweeping motion. Be cautious about wetting tender foliage, young plants and new growth. Do not spray plants when temperature exceeds 90°F. Contact insects directly whenever possible. Repeat treatment as infestations occur.

**Listed Nuisance Insect Pests:** 1 gallon **BIO KILL® brand INSECTICIDE** treats 800 linear feet with a 6-inch band. [16 fl. oz. **BIO KILL® brand INSECTICIDE** treats 100 linear feet with a 6-inch band.]

**Outside Surfaces of Buildings:** To kill *ants, clover mites, crickets, earwigs, millipedes, sowbugs (pillbugs)*. To help prevent infestations, spray the building foundation to a height of 2-3 feet where insects are active and may find entrance. Apply as a residual spray to porches, screens, window frames, eaves, patios, garages, refuse dumps and other outside building areas where these pests congregate or are seen. Repeat treatment as needed to maintain effectiveness. To aid in reducing annoyance from *cluster flies, flying moths, gnats, house flies* and *mosquitoes*, spray outside surfaces of screens, doors, window frames or wherever these insects may enter. Treat surfaces around light fixtures on porches, in garages and other places where these insects gather. Repeat as necessary.

**Other Outdoor Areas:** To kill *crickets, earwigs* and *fleas* thoroughly spray infested areas of weeds or brushy non-crop areas. For *ants* thoroughly wet hills and runways. Repeat application as reinfestations occur.

**Wasps, Hornets, Yellow Jackets:** Application should be made in the late evening when insects are at rest. Spray liberally into hiding and breeding places, including nest openings in ground, bushes, under attic rafters and other cracks and crevices which may harbor pests. Saturate nest openings and contact as many insects as possible. Repeat as necessary.

**Fire Ants:** Apply 1 gallon of **BIO KILL® brand INSECTICIDE** as a gentle rain to each fire ant mound using a sprinkler can.

Thoroughly wet the mound and surrounding area to a 4 foot diameter (1.22 m). For best results apply in cool weather, 65°-80° F (18.5-27°C), or in early morning or late evening hours. Treat new mounds as

they appear. Do not disturb the mound prior to treatment. If possible, treat all mounds in the vicinity, and treat all colonies which may not as yet have constructed a mound.

**Ticks (including ticks which may carry lyme disease):** Apply as a residual treatment to kill *Deer tick (Ixodes dammiei)*, *Lone Star tick (Amblyomma americanum)*, *Brown dog tick (Rhipicephalus sanguineus)*, *American dog tick (Dermacentor variabilis)* and *Western black-legged tick (Ixodes pacificus)*. Apply until surface is wet (approximately 1 gal/750-1000 ft.) [(approximately 16 fl. oz./94-125 ft.)] Treat around windows and doors, porches, screens, eaves, patios, garages, under stairways and in crawl spaces where these pests may enter. Treat a band of vegetation and leaf litter 6-10 feet wide around the outside of buildings to kill ticks occurring there. To kill ticks in outdoor activity areas, treat a band of vegetation and leaf litter 6-10 feet wide and adjacent to activity areas, especially where dense vegetation occurs.

**ON DOGS: USE ONLY ON DOGS & PUPPIES GREATER THAN 12 WEEKS OLD.** Consult a veterinarian before using this product on debilitated, aged, pregnant, nursing, or medicated dogs.

To kill *fleas, ticks and lice*: Start spraying at the tail, moving the sprayer rapidly and making sure that the dog's body is covered, including the legs and underbody. While spraying fluff the hair so that the spray will penetrate to the skin. Make sure spray wets thoroughly. Do not spray into eyes or face. Avoid contact with genitalia. Repeat every three weeks. **As a dip for dogs:** Using one part product and three parts water, make up enough material to thoroughly soak dog. Wet dog with water before treatment. Sponge, dip or pour diluted product on the dog until fur and skin are thoroughly wet, making sure that the dog's entire body is treated, including the legs and underbody. Do not treat dog's face.

#### **ON LIVESTOCK:**

##### **DO NOT APPLY DIRECTLY TO LIVESTOCK USED FOR FOOD OR FEED.**

To protect cattle, goats, sheep and horses from *horn flies, face flies, mosquitoes and gnats*: Apply a light mist sufficient to wet the surface of the hair. For face flies, spray face and head, but do not spray into eyes. When used in dairy barns or facilities: Close milk bulk tank lids to prevent contamination from spray and dead or falling insects. Remove or cover milking utensils before application. Wash teats of animals before milking. In horse stables, do not apply to horses intended to be used for food or feed.

To kill *stable flies, horse flies and deer flies*: Apply at a rate of 2 ounces per adult animal, sufficient to wet the hair thoroughly. Repeat treatment daily or at intervals necessary to give protection.

To kill *blood-sucking lice*: Apply to infested area of the animal using a stiff brush to get the spray to the base of the hair. Repeat every 3 weeks if required.

To kill above listed insects and reduce annoyance to livestock, remove animals and thoroughly spray barn walls, stalls and surfaces where these pests may alight or congregate.

To kill *poultry lice*: Spray roosts, walls and nests or cages thoroughly. Follow by spraying over the bird with a fine mist.

To kill *bedbugs and mites in poultry houses*: Spray crevices of roost poles, cracks in walls and cracks in nests where the bedbugs and mites hide.

To kill *flies, mosquitoes and gnats* in barns, milk rooms, dairy plants, slaughter and poultry houses: Apply as a fog or fine mist, directing spray toward the ceiling and upper corners of the room until the area is filled with mist, using 1 oz. of **BIO KILL® brand INSECTICIDE** in 2 quarts of water to cover 1,000 cubic feet of space. For best results, close windows and doors before spraying and keep closed for 10 to 15 minutes. Vacate the area and ventilate before re-occupying. Repeat application as necessary.

#### **APPLICATION INSTRUCTIONS AS A DILUTABLE PRODUCT FOR USE ON INDOOR AND OUTDOOR PLANTS:**

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior landscapes, ornamental gardens or lawns and grounds.

Note: Do not use more **BIO KILL® brand INSECTICIDE** than labeled, as this may cause some plant injury. Use this dilution unless otherwise specified. Use with care on ferns, palms and fuchsia. As with all plants listed on this label, especially carnations, chrysanthemums and roses, there exists a wide variety of species and cultivars and, therefore, a wide variety of susceptibility to injury. To ascertain possible phytotoxicity, spray a few listed plants, wait 24 hours, and check for possible injury.

**CONTACT & RESIDUAL SPRAY** - Apply as a thorough coverage spray, wetting leaves and branches to run-off. Use sufficient spray to penetrate dense foliage. Adjust spray volume used to plant size.

**Indoor Application:** Mix 8 oz (1 cup) of **BIO KILL® brand INSECTICIDE** 0.25% with 1 gallon of water [2 oz. (4 Tbs) of **BIO KILL® brand INSECTICIDE** with 1 quart of water]. If application is to be made indoors, remove infested plants from living areas prior to application. Spray plants in an area not likely to be occupied by children or pets (particularly fish). When leaves dry, plants can be returned to original location. Do not enter or allow others to enter until sprays have dried.

To protect plants in indoor landscaping, spray directly on insects to kill *leafrollers, armyworms, cutworms* and *cabbageworms* on Chrysanthemums; *fungus gnats* on Velvet plants. Spray as directed above to kill *aphids, armyworms, corn earworms, fall cankerworms, inchworms, Japanese beetles, leafminers, leafrollers, mealybugs, scale, spider mites, spring cankerworms, exposed thrips* and *whiteflies* on the following: Ageratum, Ardisia, Aster, Azalea, Baby's breath, Begonia, Birdsnest fern, Bleeding heart, Carnation, Chrysanthemum, Coleus, Crown of thorns, Cockscomb, Cyclamen, Dracaena, Dumbcane, English ivy, Fuchsia, Gladiolus, Grape ivy, Hypoestes Ivy, Juniper, Lily, Marigold, Orchid, Palm, Pansy, Peperomia, Petunia, Philodendron, Piggy-back plant, Poinsettia, Portulaca, Pothos, Prayer plant, Purple passion, Rabbits foot fern, Rose, Schefflera, Snapdragon, Snake plant, Statice, Velvet plant, Verbena, Zinnia.

**Outdoor Application:** All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Treatment to soil or vegetation around structures;
- (2) Applications to lawns, turf and other vegetation;
- (3) Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

Mix 8 oz (1 cup) of **BIO KILL® brand INSECTICIDE** 0.25% with 1 gallon of water [2 oz. (4 Tbs) of **BIO KILL® brand INSECTICIDE** with 1 quart of water]. Spray in the late afternoon or evening when temperature ranges from 50°F to 78°F, and when there is little or no wind. Spray at the first sign of insect pests. On those plants that will flower during the season, the spray schedule should be completed before blossom formation. Repeat as necessary; use intervals of 4 to 8 days. **BIO KILL® brand INSECTICIDE** application can be made up to the day of collection. Repeat applications may be necessary to kill citrus blackflies on non-bearing citrus; adult Japanese beetles on roses.

#### **Garden Insects**

**Roses & Flowers:** Spray as directed above to kill *aphids, cicadas, corn earworms, fall cankerworms, fall webworms, inchworms, leafminers, leafrollers, mealybugs, bagworms, spider mites, exposed thrips and whiteflies* on the following: Ageratum, Aster, Azalea, Begonia, Coleus, Common ninebark, Common snowberry, Exacum, Gladiolus, Gold bells, Hypoestes, Ivy, Lilac, Marigold, Mock orange, Nannyberry, Orchid, Pansy, Pea shrub, Petunia, Poinsettia, Rhododendron, Rose, Snapdragon, Wax plants, Zinnia.

**Trees & Shrubs:** Use sufficient spray to obtain full coverage of all foliage. Avoid heavy wetting. Use to kill *aphids, bagworms, cicadas, exposed thrips, fall cankerworms, inchworms, leafminers, leaf rollers, mealybugs, spider mites* and *whiteflies* on the following: Arizona cypress, Birch, non-bearing Cherry, non-bearing Citrus, Conifers, Elm, Euonymus, English ivy, Fir, Honeysuckle, Oak, Palm, Philodendron, Pine, Taxus, Tulip Poplar and Weeping fig. Use to kill *pine moths, pine needleminers, pine beetles and needle scales* on Pine; *budworms* on Conifers; *oakworms* on Oak; *fall webworms* on Cherry, Elm and Honeysuckle; *citrus black flies* on non-bearing citrus; *tussock moths* on Douglas and grand firs; *leafminers* on Birch; *elm leaf beetle and elm spanworms* on Elms. To kill *tent caterpillars*: Application should be made when caterpillars are young and tents are first noticed. For best results, apply in late afternoon or evening, when caterpillars have returned to their tents. Apply **BIO KILL® brand INSECTICIDE FULL STRENGTH**. Wet tents with spray on all sides. A few caterpillars may be seen escaping from the tent; however, they should die within several hours.

**LAWNS:** For *armyworms* mix 4½ oz. in 1 gal. of water and use 10 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft. For *brown dog ticks, chinch bugs, cutworms, fleas, Japanese beetle grubs, mole crickets* and *sod webworms* mix 1 oz. in 1 gal. of water. Use 10 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft. To kill *ants (including fire ants), crickets* and *grasshoppers* mix 6.4 oz. in 1 gal. of water. Use 3 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft.

Thoroughly wet down grass a few hours before applying. Lawns should be no taller than 3 inches at time of application. Slightly more water may be used as long as the amount of product per area is as listed above. For heavy infestations, repeat application after 2 weeks. Also for kill of *cutworms on dichondra and Irish moss*. Use as directed above for lawns.

### Storage & Disposal

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

**Pesticide Storage and Spill Procedures:** Keep from freezing. 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.

{CONTAINERS ONE GALLON AND SMALLER}

**Pesticide Disposal:** *If partly filled* - Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain

**Container Handling:** *If empty* – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

{CONTAINERS LARGER THAN ONE GALLON}

**Pesticide Disposal:** Pesticide or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container.

**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.

**NOTICE:** To the extent consistent with applicable law, buyer assumes all risks of use, storage of handling of this product not in strict accordance with directions given herewith.

Jesmond Holding Ag, Chollertrasse 35, CH 6301, Zug, Switzerland  
{Lot no. to be added at production.}

{VERSION B: RESIDENTIAL USE}

{FRONT PANEL}

## BIO KILL® brand INSECTICIDE

{Optional Statements}

[Makes up to 16 gallons

Water-based Permethrin insecticide

Odorless in application.

For use INDOORS on houseplants and in indoor landscaping

A READY-TO-USE and DILUTABLE Permethrin-based emulsion insecticide

Dilutable for use on plants

For use OUTDOORS on ornamental trees, shrubs and flowers, on lawns.

For use outdoors, in homes and non-food areas of food/feed processing establishments, hotels, motels, commercial buildings, schools, warehouses, theaters, office buildings and kennels

Will not stain water-safe fabrics and surfaces

For use indoors and outdoors on a wide variety of listed crawling and flying insects

Use on DOGS to kill fleas and ticks

Can be used as a DIP for fleas on DOGS

Use on Poultry to kill lice and mites

Provides effective broad-spectrum kill of listed building and ornamental garden insect pests

Effective for up to four weeks

Multipurpose, ready-to-use, water based bug killer

Non-flammable

Easy to use - just spray affected areas

Use indoors and outdoors - broad spectrum insecticide includes: cockroaches, mosquitoes, ants, spiders, flies, moths, fleas, lice, bedbugs, crickets, grasshoppers and many, many other listed species

No odor - Non-staining - No sticky residue

Odorless and Multi-purpose Insecticide

Long lasting - residual effect up to 4 weeks

Sold in over 30 countries

Ready-to-use, water-based bug killer

Kills listed *crawling* insects, including cockroaches, ants, fire ants, fleas, spiders, ticks, lice, silverfish, earwigs, beetles, bedbugs, crickets and more!

Kills listed *flying* insects, including flies, moths, mosquitoes, gnats, hornets, wasps, black flies and more!

Rx for bugs.

For Bedding & Furniture

**NOT FOR USE ON HUMANS**

Observe all precautionary statements and follow directions for use carefully.

Household insects: cockroaches, fleas, bed bugs, and others listed.

Household plants and indoor landscaping

Spray for dogs to eliminate fleas, ticks and lice]

**ACTIVE INGREDIENT:**

Permethrin ..... 0.25%

**OTHER INGREDIENTS:** ..... 99.75%

100.00%

{NOTE TO EPA: Front panel of label may include graphics representing product use; e.g., listed insects}

**Keep Out of Reach of Children**

**CAUTION**

See [back] [side] panel(s) [& accompanying booklet] for First Aid and additional precautionary statements

**NET CONTENTS** \_\_\_\_\_

**{BACK/SIDE/OTHER PANEL(S) &/OR BOOKLET, WHEN NECESSARY}**

**READ ENTIRE LABEL BEFORE EACH USE.**

**SHAKE BOTTLE WELL BEFORE USING**

**HOUSEHOLD APPLICATIONS:**

House plants and indoor landscape

Inside - along baseboards, in carpets, mattresses, around cupboards, etc.

Outside – in ornamental gardens, on ornamental flowers, and lawns.

Kills listed bugs inside garbage bins, garbage dumpsters and in garbage chutes

**DOMESTIC ANIMALS:**

Dogs to kill fleas & ticks

Poultry to kill lice, fleas & ticks

**DO NOT USE ON CATS**

Livestock to kill horn flies, face flies, mosquitoes and gnats. **DO NOT APPLY DIRECTLY TO LIVESTOCK USED FOR FOOD OR FEED**

**[NOTE TO EPA:** When marketed for use on dogs, the following precautionary statement will be added to label:

**PRECAUTIONARY STATEMENTS  
Hazards to Humans and Domestic Animals**

**CAUTION**

User Safety Recommendations: Wear long-sleeved shirt and long pants, socks and shoes. User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

**{NOTE TO EPA:** When marketed for use on dogs, the following precautionary statement will be added to label:}

**[CAUTION:** Sensitivities may occur after using ANY pesticide product for dogs. If signs of sensitivity occur, bathe your dog with mild soap and rinse with large amounts of water. If signs continue, consult a veterinarian immediately.]

**{WHEN LABELED FOR OUTDOOR USE AS A *DILUTABLE PRODUCT* to be mixed with water}**

**[ENVIRONMENTAL HAZARDS**

This product is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems. This pesticide is highly toxic to bees and other pollinating insects exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds when bees or other pollinating insects are foraging the treatment area.]

**{WHEN LABELED FOR OUTDOOR USE AS A *READY TO USE PRODUCT*}**

**[ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours



will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. This pesticide is highly toxic to bees and other pollinating insects 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 or other pollinating insects are foraging the treatment area.]

### DIRECTIONS FOR USE

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

**Use Restrictions:** For use as a surface spray, do not allow adults, children or pets to enter until sprays have dried. Do not apply as a broadcast treatment to indoor surfaces at residential sites, including nurseries, day care centers, schools, hospitals, and nursing homes. For outdoor application, use in a handheld cold or thermal fogger is prohibited. Do not make applications during rain. Do not water the treated area to the point of runoff. Not for use in outdoor residential misting systems. In horse stables, do not apply to horses intended to be used for food or feed.

FOR USE IN NON-FOOD AREAS INDOORS AND OUTSIDE PREMISES OF HOMES, HOBBY GREENHOUSES AND STORAGE BUILDINGS, CAMPERS, MOBILE HOMES, AUTOMOBILES, TRUCKS, AND BOATS. ALSO FOR USE IN DOG KENNELS AND HORSE STABLES.

### INDOOR APPLICATIONS:

In the home, cover all food handling surfaces, cover or remove all food and cooking utensils or wash thoroughly after treatment. Application is prohibited directly into sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application. Except when applying to dogs or livestock do not enter or allow others to enter until sprays have dried. Do not apply directly to livestock used for food or feed.

**Surface Spraying:** Provides kill of crawling and flying household insect pests for up to 4 weeks.

To kill *ants, boxelder bugs, brown dog ticks, cadelles, centipedes, cheese mites, cluster flies, clover mites, cockroaches, crickets, earwigs, fire ants, flying moths, fruit flies, gnats, grasshoppers, house flies, Lone star ticks, mealworms, millipedes, mosquitoes, palmetto bugs, rice weevils, scorpions, silverfish (firebrats), sowbugs (pillbugs), spider beetles, spiders and waterbugs*: Direct the spray into hiding places, cracks and crevices, behind shelves and drawers, moist areas, openings around pipes and sinks, under refrigerators. Spray directly into and around floor drains. For silverfish, spray bookcases. For Ants, spray trails, nests and points of entry.

To kill *carpet beetles*: Apply as a spot treatment only. Hold container 14-18 inches from carpet. Apply spray evenly, covering until slightly moist. Avoid wetting or soaking. Spray underside of carpet when possible. Also spray floor and along baseboards, cracks and crevices wherever these insects are seen or suspected.

To kill *bedbugs*: Spray mattresses lightly, particularly around tufts and seams. Take beds apart and spray in all joints. Allow all sprayed articles to dry thoroughly before use.

To kill *fleas* (adult and larvae) and *ticks* (adult and nymphs): Apply as a spot treatment only. Remove and thoroughly clean or destroy pet bedding. Spray pet sleeping quarters, beds, floor and floor covering (e.g., rugs and carpeting) with special attention to cracks and crevices around baseboards, and window and door frames. Infested upholstered furniture may also be treated with this product. Make a test application to upholstery or drapery fabrics in an inconspicuous place before use. Allow to dry thoroughly before allowing pets to contact treated areas.

To kill *clothes moths*: Remove and brush thoroughly any infested articles from storage and air for several hours in sunlight, if possible. Apply spray liberally to empty chests, closets, bureaus and other storage areas directing the spray into cracks, joints and crevices. After airing, infested articles may be treated lightly by keeping nozzle at least 3 feet from fabric to avoid possible staining. Allow all sprayed articles

to dry thoroughly before use.

To kill *lice* and *louse eggs*: Treat only those garments and parts of bedding, including mattresses and furniture that cannot be either laundered or dry cleaned. Spray in an inconspicuous area to test for possible staining or discoloration. Inspect again after drying, then proceed to spray entire area to be treated. Spray from a distance of 8 to 10 inches. Allow all treated articles to dry thoroughly before use.

**Grain Insects:** To kill *confused flour beetles, saw-toothed grain beetles, spider beetles, shiny spider beetles, grain mites, red flour beetles, angoumois grain moths, grain weevils, Indian meal moths, Mediterranean flour moths, lesser grain borers, cigarette beetles, drug store beetles, chocolate moths and carpet beetles* remove infested grain, cereal or flour and destroy. Remove other food and foodstuffs in the area before spraying. Spray directly on exposed stages and into cracks and crevices where grain insects may be hiding. In homes, dispose of all infested products. Clean shelves and drawers thoroughly before applying product. Wash any utensils that are contacted with spray before reusing. Repeat as necessary.

#### **OUTDOOR APPLICATIONS:**

All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Treatment to soil or vegetation around structures;
- (2) Applications to lawns, turf and other vegetation;
- (3) Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

**Garden Insects:** For use on roses, dahlias, asters and other ornamentals to kill *Japanese beetles* as well as *whiteflies, aphids, lace bugs, ants, exposed thrips, spiders, red mites and leafminers*. May be used on plants in small gardens as a multi-purpose spray and for spot treatments of incipient insect infestations to prevent spreading into larger garden areas.

When spraying plants, do not hold nozzle closer than 18 inches. Use a sweeping motion. Be cautious about wetting tender foliage, young plants and new growth. Do not spray plants when temperature exceeds 90°F. Contact insects directly whenever possible. Repeat treatment as infestations occur.

**Nuisance Insect Pests:** 1 gallon **BIO KILL® brand INSECTICIDE** treats 800 linear feet with a 6-inch band. [16 fl. oz. **BIO KILL® brand INSECTICIDE** treats 100 linear feet with a 6-inch band.]

**Outside Surfaces of Buildings:** To kill *ants, clover mites, crickets, earwigs, millipedes, sowbugs (pillbugs)*. To help prevent infestations, spray the building foundation to a height of 2-3 feet where insects are active and may find entrance. Apply as a residual spray to porches, screens, window frames, eaves, patios, garages, refuse dumps and other outside building areas where these pests congregate or are seen. Repeat treatment as needed to maintain effectiveness. To aid in reducing annoyance from *cluster flies, flying moths, gnats, house flies* and *mosquitoes*, spray outside surfaces of screens, doors, window frames or wherever these insects may enter. Treat surfaces around light fixtures on porches, in garages and other places where these insects gather. Repeat as necessary.

**Other Outdoor Areas:** To kill *crickets, earwigs* and *fleas* thoroughly spray infested areas of weeds or brushy non-crop areas. For *ants* thoroughly wet hills and runways. Repeat application as reinfestations occur.

**Wasps, Hornets, Yellow Jackets:** Application should be made in the late evening when insects are at rest. Spray liberally into hiding and breeding places, including nest openings in ground, bushes, under attic rafters and other cracks and crevices which may harbor pests. Saturate nest openings and contact as

many insects as possible. Repeat as necessary.

**Fire Ants:** Apply 1 gallon of **BIO KILL® brand INSECTICIDE** as a gentle rain to each fire ant mound using a sprinkler can.

Thoroughly wet the mound and surrounding area to a 4 foot diameter (1.22 m). For best results apply in cool weather, 65°-80° F (18.5-27°C), or in early morning or late evening hours. Do not disturb the mound prior to treatment. If possible, treat all mounds in the vicinity, and treat all colonies which may not as yet have constructed a mound. Treat new mounds as they appear.

**Ticks (including ticks which may carry lyme disease):** Apply as a residual treatment to kill *Deer tick (Ixodes dammiei)*, *Lone Star tick (Amblyomma americanum)*, *Brown dog tick (Rhipicephalus sanguineus)*, *American dog tick (Dermacentor variabilis)* and *Western black-legged tick (Ixodes pacificus)*. Apply until surface is wet (approximately 1 gal/750-1000 ft.) [(approximately 16 fl. oz./94-125 ft.)] Treat around windows and doors, porches, screens, eaves, patios, garages, under stairways and in crawl spaces where these pests may enter. Treat a band of vegetation and leaf litter 6-10 feet wide around the outside of buildings to kill ticks occurring there. To kill ticks in outdoor activity areas, treat a band of vegetation and leaf litter 6-10 feet wide and adjacent to activity areas, especially where dense vegetation occurs. Retreat as infestations occur.

**ON DOGS: USE ONLY ON DOGS & PUPPIES GREATER THAN 12 WEEKS OLD.** Consult a veterinarian before using this product on debilitated, aged, pregnant, nursing, or medicated dogs.

To kill *fleas, ticks and lice*: Start spraying at the tail, moving the sprayer rapidly and making sure that the dog's body is covered, including the legs and underbody. While spraying fluff the hair so that the spray will penetrate to the skin. Make sure spray wets thoroughly. Do not spray into eyes or face. Avoid contact with genitalia. Repeat every three weeks. **As a dip for dogs:** Using one part product and three parts water, make up enough material to thoroughly soak dog. Wet dog with water before treatment.

Sponge, dip or pour diluted product on the dog until fur and skin are thoroughly wet, making sure that the dog's entire body is treated, including the legs and underbody. Do not treat dog's face.

#### **ON LIVESTOCK:**

##### **DO NOT APPLY DIRECTLY TO LIVESTOCK USED FOR FOOD OR FEED.**

To protect companion goats, sheep and horses from *horn flies, face flies, mosquitoes and gnats*: Apply a light mist sufficient to wet the surface of the hair. For face flies, spray face and head, but do not spray into eyes.

To kill *stable flies, horse flies and deer flies*: Apply at a rate of 2 ounces per adult animal, sufficient to wet the hair thoroughly. Repeat treatment daily or at intervals necessary to give protection.

To kill *blood-sucking lice*: Apply to infested area of the animal using a stiff brush to get the spray to the base of the hair. Repeat every 3 weeks if required.

To kill the above listed insects and reduce annoyance to animal, remove animals and thoroughly spray barn walls, stalls and surfaces where these pests may alight or congregate.

To kill *poultry lice*: Spray roosts, walls and nests or cages thoroughly. Follow by spraying over the bird with a fine mist.

To kill *bedbugs and mites in poultry houses*: Spray crevices of roost poles, cracks in walls and cracks in nests where the bedbugs and mites hide.

To kill *flies, mosquitoes and gnats* in barns and poultry houses: Apply as a fog or fine mist, directing spray toward the ceiling and upper corners of the room until the area is filled with mist, using 1 oz. of **BIO KILL® brand INSECTICIDE** in 2 quarts of water to cover 1,000 cubic feet of space. For best results, close windows and doors before spraying and keep closed for 10 to 15 minutes. Vacate the area and ventilate before re-occupying. Repeat application as necessary.

## **DIRECTIONS FOR USE AS A *DILUTABLE PRODUCT***

### **FOR USE ON INDOOR AND OUTDOOR PLANTS:**

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climatic modification and being grown in interior plantscapes, ornamental gardens or lawns and grounds.

Note: Do not use more **BIO KILL® brand INSECTICIDE** than labeled, as this may cause some plant injury. Use this dilution unless otherwise specified. Use with care on ferns, palms and fuchsia. As with all plants listed above, especially carnations, chrysanthemums and roses, there exists a wide variety of species and cultivars and, therefore, a wide variety of susceptibility to injury. To ascertain possible phytotoxicity, spray a few plants as described above, wait 24 hours, and check for possible injury.

**CONTACT & RESIDUAL SPRAY** - Apply as a thorough coverage spray, wetting leaves and branches to run-off. Use sufficient spray to penetrate dense foliage. Adjust spray volume used to plant size.

**Indoor Application:** Mix 8 oz (1 cup) of **BIO KILL® brand INSECTICIDE 0.25%** with 1 gallon of water [2 oz. (4 Tbs) of **BIO KILL® brand INSECTICIDE** with 1 quart of water]. If application is to be made indoors, remove infested plants from living areas prior to application. Spray plants in an area not likely to be occupied by children or pets (particularly fish). When leaves dry, plants can be returned to original location.

To protect plants in indoor landscaping, spray directly on insects to kill *leafrollers, armyworms, cutworms* and *cabbageworms* on Chrysanthemums; *fungus gnats* on Velvet plants. Spray as directed above to kill *aphids, armyworms, corn earworms, fall cankerworms, inchworms, Japanese beetles, leafminers, leafrollers, mealybugs, scale, spider mites, spring cankerworms, exposed thrips* and *whiteflies* on the following: Ageratum, Ardisia, Aster, Azalea, Baby's breath, Begonia, Birdsnest fern, Bleeding heart, Carnation, Chrysanthemum, Coleus, Crown of thorns, Cockscomb, Cyclamen, Dracaena, Dumbcane, English ivy, Fuchsia, Gladiolus, Grape ivy, Hypoestes Ivy, Juniper, Lily, Marigold, Orchid, Palm, Pansy, Peperomia, Petunia, Philodendron, Piggy-back plant, Poinsettia, Portulaca, Pothos, Prayer plant, Purple passion, Rabbits foot fern, Rose, Schefflera, Snapdragon, Snake plant, Statice, Velvet plant, Verbena, Zinnia.

**Outdoor Application:** All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

- (1) Treatment to soil or vegetation around structures;
- (2) Applications to lawns, turf and other vegetation;
- (3) Applications to building foundations, up to a maximum height of 3 feet.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only.

Mix 8 oz (1 cup) of **BIO KILL® brand INSECTICIDE 0.25%** with 1 gallon of water [2 oz. (4 Tbs) of **BIO KILL® brand INSECTICIDE** with 1 quart of water]. Spray in the late afternoon or evening when temperature ranges from 50°F to 78°F, and when there is little or no wind. Spray at the first sign of insect pests. On those plants that will flower during the season, the spray schedule should be completed before blossom formation. Repeat as necessary; use intervals of 4 to 8 days. **BIO KILL® brand INSECTICIDE** application can be made up to the day of collection. Repeat applications may be necessary to kill citrus blackflies on non-bearing citrus; adult Japanese beetles on roses.

**Roses & Flowers:** Spray as directed above to kill *aphids, cicadas, corn earworms, fall cankerworms, fall webworms, inchworms, leafminers, leafrollers, mealybugs, bagworms, spider*

*mites, exposed thrips and whiteflies* on the following: Ageratum, Aster, Azalea, Begonia, Coleus, Common ninebark, Common snowberry, Exacum, Gladiolus, Gold bells, Hypoestes, Ivy, Lilac, Marigold, Mock orange, Nannyberry, Orchid, Pansy, Pea shrub, Petunia, Poinsettia, Rhododendron, Rose, Snapdragon, Wax plants, Zinnia.

**Trees & Shrubs:** Use sufficient spray to obtain full coverage of all foliage. Avoid heavy wetting. Use to kill *aphids, bagworms, cicadas, exposed thrips, fall cankerworms, inchworms, leafminers, leaf rollers, mealybugs, spider mites* and *whiteflies* on the following: Arizona cypress, Birch, non-bearing Cherry, non-bearing Citrus, Conifers, Elm, Euonymus, English ivy, Fir, Honeysuckle, Oak, Palm, Philodendron, Pine, Taxus, Tulip Poplar and Weeping fig. Use to kill *pine moths, pine needleminers, pine beetles and needle scales* on Pine; *budworms* on Conifers; *oakworms* on Oak; *fall webworms* on Cherry, Elm and Honeysuckle; *citrus black flies* on non-bearing citrus; *tussock moths* on Douglas and grand firs; *leafminers* on Birch; *elm leaf beetle and elm spanworms* on Elms. To kill *tent caterpillars*: Application should be made when caterpillars are young and tents are first noticed. For best results, apply in late afternoon or evening, when caterpillars have returned to their tents. Apply **BIO KILL® brand INSECTICIDE FULL STRENGTH**. Wet tents with spray on all sides. A few caterpillars may be seen escaping from the tent; however, they should die within several hours.

**LAWNS:** For *armyworms* mix 4½ oz. in 1 gal. of water and use 10 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft. For *brown dog ticks, chinch bugs, cutworms, fleas, Japanese beetle grubs, mole crickets* and *sod webworms* mix 1 oz. in 1 gal. of water. Use 10 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft. To kill *ants (including fire ants), crickets* and *grasshoppers* mix 6.4 oz. in 1 gal. of water. Use 3 gals. of diluted **BIO KILL® brand INSECTICIDE** solution to cover 1,000 sq. ft.

Thoroughly wet down grass a few hours before applying. Lawns should be no taller than 3 inches at time of application. Slightly more water may be used as long as the amount of product per area is as listed above. For heavy infestations, repeat application after 2 weeks. Also to kill *cutworms on dichondra and Irish moss*. Use as directed above for lawns.

### Storage & Disposal

**Pesticide Storage:** Keep from freezing. Store upright at room temperature, out of reach of children and pets.

**Pesticide Disposal:** *If partly filled* - Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain

**Container Handling:** *If empty* – Nonrefillable container. Do not reuse or refill this container. Place in trash or offer for recycling if available.

**NOTICE:** To the extent consistent with applicable law, buyer assumes all risks of use, storage of handling of this product not in strict accordance with directions given herewith.

Jesmond Holding Ag, Chollertrasse 35, CH 6301, Zug, Switzerland

{When marketed by subregistrant as a 3<sup>rd</sup> product offering labeled for use on lice:}



[

This third product (#3) under the NIX® brand is intended to compliment the use of crème rinse and combing gels with combs for lice removal. [**BIO KILL® brand INSECTICIDE**] is labeled for use on listed bedding and furniture and is not for use on humans.]

{Lot no. to be added at production.}