



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

EPA Reg. Number:

82074-13

Date of Issuance:

3/21/17

NOTICE OF PESTICIDE:

Registration
 Reregistration
(under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

BIOGARD CONCENTRATE

Name and Address of Registrant (include ZIP Code):

Luis A. Mazariegos, PhD
President
LAM International Corporation
117 South Parkmont
Butte, MT 59701

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

Signature of Approving Official:

Kable Bo Davis, Product Manager 03
Invertebrate & Vertebrate Branch 1, Registration Division (7505P)

Date:

3/21/17

3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 82074-13.”
4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

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.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSF:

- Basic CSF dated 6/10/2016

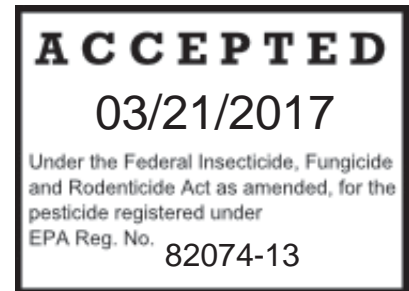
If you have any questions, you may contact Julie Breeden-Alemi at 703-347-0511 or via email at Breedon-Alemi.Julie@epa.gov.

Enclosure

BIOGARD CONCENTRATE

ACTIVE INGREDIENT:
 Pyrethrins 5.00%
OTHER INGREDIENTS: 95.00%
TOTAL 100.00%

This product contains 0.41 lbs. Pyrethrins per gallon.



KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • Call poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF INHALED	<ul style="list-style-type: none"> • Move the person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information regarding medical emergencies or pesticide incidents, call 1-888-740-8712.</p>	

LAM INTERNATIONAL CORPORATION

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 EPA Reg. No. 82074-X EPA Est. Number 65626-MT-02

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 Expiration Date:

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Harmful if inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reused. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers must wear the following:

- Long-sleeved shirt
- Long pants
- Shoes and socks
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber or Viton.

In addition to the above PPE, applicators using handheld foggers in an enclosed area must wear a half-face (with goggles), full-face, or hood-style NIOSH-approved respirator with:

- A NIOSH approved particulate filter with any R or P filter with NIOSH approval number prefix TC-84A;
- A NIOSH approved canister for pesticides with NIOSH approval number prefix TC-14G;
- A NIOSH approved powered air purifying respirator with an HE filter with NIOSH approval number prefix TC-21C

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

When handlers use aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides 40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

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

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms, including fish and invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product may contaminate water through runoff. This product has a potential for runoff for several weeks after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are foraging the treatment area. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash-waters or rinsate

DIRECTIONS FOR USE

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

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. For any requirements specific to your State or Tribe, consult the agency for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR, Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Long sleeved shirt and long pants;
- Chemical-resistant gloves, such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton;
- Shoes plus socks.

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.

For any requirement specific to your State or Tribe, consult the agency responsible for pesticide regulation

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR, Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow others to enter until vapors, mists, and aerosols have dispersed, and the treated area has been thoroughly ventilated.

Do not enter or allow others to enter until sprays have dried.

PESTICIDE RESISTANCE MANAGEMENT

BIOGARD CONCENTRATE contains a Group 3A insecticide. Insect biotypes with acquired resistance to Group 3A may eventually dominate the insect population if Group 3A insecticides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by BIOGARD CONCENTRATE or other Group 3A insecticides.

To delay insecticide resistance consider:

- Avoiding the consecutive use of BIOGARD CONCENTRATE or other group 3A insecticides that have a similar target site of action, on the same insect species.
- Using tank mixtures or premixes with insecticides from a different target site of action Group as long as the involved products are all registered for the same use and have different sites of action.
- Basing insecticide use on a comprehensive IPM program.
- Monitoring treated insect population for loss of field efficacy.

- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for insecticide resistance management and or IPM recommendations for the specific site and resistance pest problems.

INDOOR AREAS FOR USE IN AND AROUND:

Aircraft (not aircraft cabins), Animal Areas and Quarters, Animal Control Centers, Animal Shelters, Apartments, Arcades, Assisted Living Facilities, Attics, Auditoriums, Bakeries, Barns, Bars, Basements, Bathrooms, Beverage Plants, Boats, Bottling Plants, Breweries, Brewery Warehouses, Buildings, Buses, Cabinets, Cabins, Cafeterias, Campers, Canneries, Casinos, Cattle Barns, Cattle Stalls, Churches, Circus Tents, City Missions, Classrooms Closets, Club Houses, Coffee Shops, Colleges, Commercial Buildings, Communication Centers, Concession Stands, Condominiums, Court Houses, Crawl Spaces, Crematoriums, Dairies, Dairy Stalls and Holding Areas, Day Care Centers, Delicatessens, Department Stores, Diners, Dog Houses, Drugstores, Dumpsters Dwellings, Egg Processing Plants, Factories, False Ceilings, Food Processing Plants, Food Storage Areas, Freight Containers, Frozen Food Plants, Fruit Packing Sheds, Funeral Parlors, Garages, Garbage Bins, Garbage Cans, Garbage Compactors, Garbage Trucks, Gas Stations, Grain Elevators, Grain Harvesting and Handling Equipment, Grain Mills, Granaries, Grocery Stores, Health Care Facilities, Herb Drying and Processing Facilities, Herb Warehouses, Homes, Horse Stables and Barns, Horse Trailers, Hospices, Hospitals, Hotels, Indoor Eating Establishments, Industrial Installations, Institution Dining Areas, Institutions, Jails, Kennels, Laboratories, Laundromats, Lavatories, Libraries, Liquor Stores, Livestock Barns, Livestock Hauling Equipment, Loafing Sheds, Locker Rooms, Mausoleums, Meat Packing Plants, Mess Halls, Milk Rooms, Milking Parlors, Mills, Mini Storage, Mobile Canteens, Mobile Homes, Morgues, Mortuaries, Motels, Movie Theaters, Museums, Mushroom Processing Areas, Nursing Homes, Office Buildings, Other Public Buildings, Parking Garages, Passenger Railroad Cars, Peanut Warehouses, Pool Halls, Poultry Houses, Poultry Plants, Pounds, Prisons, Public Storages, Rabbit Processing Plants, Railroad Cars, Recreational Vehicles, Research Animal Quarters, Restaurants, Retail Stores, Rice Mills, Schools, Seed Production Facilities, Seed Warehouses, Ship Holds Ships, Smoke Shops, Spice Plants, Spice Production Facilities, Sports Stadiums, Stables, Storage Bins (areas), Storage or Processing Areas that contain Dried Fruit Products, Stores, Supermarkets, Swine Houses, Taverns, Textile Mills and Warehouses, Theaters, Tobacco Factories, Tobacco Warehouses, Tool Sheds, Trains, Transportation Equipment, Truck Trailers, Trucks, Tunnels, Universities, USDA Inspected Facilities, Utilities, Utility Rooms, Vending Machines, Veterinary Hospitals, Wall and Equipment Voids, Warehouses, Washrooms, Wheat Mills, Wholesale Stores, Wine Cellars, Wineries, Zoos

OUTDOOR AREAS FOR USE IN AND AROUND:

Alleys, Amphitheaters, Amusement Parks, Athletic Fields (baseball, football, soccer), Back Yards, Baseball Fields, Bleachers, Bridges, Campgrounds, Car Washes, Circuses, Construction Sites, Corrals, Courtyards Curbs, Drive-In Restaurants, Drive-In Theaters, Dumpsters, Exterior of Homes and Other Buildings, Fair Grounds, Feedlots, Front Yards, Game Fields, Garbage Dumps, Gardens, Gazebos, Golf Courses, Grand Stands, Greenhouses, Junk Yards, Kennels, Levees, Livestock Pasture, Manure Piles, Outdoor Eating Establishments, Outdoor Growing Crops, Parking Lots, Parks, Patios, Playgrounds Racetracks, Ranges, Recreation Areas, Rest Areas, Roadsides, Rooftops, Sanitary Sewers (manholes), School Yards, Side Walks, Side Yards, Stadiums, Tennis Courts, Trees, Shrubs, Flowers and Foliage Plants, Truck Stops, Underpasses, Urban Areas, Utility Rooms Outdoors, Weigh Stations, Wild Animal Parks, Wood Piles, Zoos and Other Similar Areas.

FOR USE ON:

Beefalo, Birds, Buffalo, Calves, Cattle-beef and milking, Chickens, Donkeys, Ducks, Elk, Emus, Exotics, Geese, Goats, Hogs, Horses, Lambs, Livestock, Llamas, Mules, Ostrich, Oxen, Pheasants, Ponies, Poultry, Pullets, Quail, Ratites, Roosters, Sheep, Swine, Turkeys.

TO KILL THE FOLLOWING INSECTS:

Angoumois Grain Moths, Ants (excluding fire and Pharaoh ants), Aphids, Apple Maggots, Armored Scales, Armyworms, Artichoke Plume Moths, Asparagus Beetles, Bagworms, Bean Beetles, Beet Armyworms, Beetles, Bermuda Grass Mirids, Billbugs, Blister Beetles, Blow Flies, Boll Weevils, Box Elder Bugs, Branch and Twig Borers, Cabbage Loopers, Cabbage Maggots, Cadelles, Cankerworms, Carrot Weevils, Caterpillars, Chalcids, Cheese Skippers, Cherry Fruit Flies, Cigarette Beetles, Clover Mites, Clover Weevils, Cockroaches, Codling Moths, Colorado Potato Beetles, Confused Flour Beetles, Corn Earworms, Crane Flies, Crickets, Cross-striped Cabbageworms, Cucumber Beetles, Cucumber Beetles (12-spotted), Dark Mealworms, Darkling Beetles (lesser meal worm), Diamondback Larvae and Moths, Dried Fruit Beetles, Drugstore Beetles, Earwigs, Eastern Tent Caterpillars, Elm Leaf Beetles, Eriophyid Mites, European Pine Tip Moths, Fire worms, Flea Beetles, Fleas, Forest Tent Caterpillars, Fruit Flies, Fruit tree Leafrollers, Fruit worms, Fungus Gnats, Garden Symphylan, Glassy Winged Sharpshooters, Gnats, Grain Mites, Grape Leaf Skeletonizers, Grape Leafhoppers, Grape Mealy bugs, Grasshoppers, Green bugs, Green Fruit Worms, Green Peach Aphids, Greenhouse Thrips, Gypsy Moths (adults & larvae), Harlequin Bugs, Heliothis spp., Horn Flies, Hornworms, House Flies, Imported Cabbageworms, Indian Meal Moths, Japanese Beetles, Katydid, Lace Bugs, Leaf-footed plant bugs, Leafhoppers, Leafminers, Leafrollers, Leathers, Loopers, Lygus, Maggots, Mealy Bugs, Mediterranean Flour Moths, Mexican Bean Beetles, Midges (non-biting), *Millipedes*, *Mites*, Mole crickets, Moths, Mushroom Flies, Navel Orange worms, Olive Fruit Flies, Onion Maggots, Orange Tortrix, Pacific flatheaded borers, Pear Psyllids, Pepper Weevils, Pink bollworms, Potato Leafhoppers, Potato Tuber worms, Poultry Lice, Proba bugs, Psyllids, Red Flour Beetles, Rice Weevils, Saltmarsh caterpillars, Saw-Toothed Grain Beetles, Scales, Sharpshooters, Sheep "Tick" or Ked, Shore flies, Shot hole borers, Silverfish, Skippers, Small Flying Moths, Soft Scales, Southern chinch bugs, Sow bugs, Spider Beetles, Springtails, Squash bugs, Stable Flies, Stink Bugs, Tarnished Plant Bugs, Thrips, Ticks, Tobacco Moths, Tomato budworms, Tomato bugs, Tomato Fruit worms, Tomato Hornworms, Tomato pinworms, Tomato Russet Mite, Tussock moths, Vine mealy bugs, Vinegar Flies, Webworms, Weevils, Western Yellow-striped armyworms, Whiteflies and Yellow Mealworms.

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.
- Not for use in outdoor metered release devices.
- Keep unprotected persons out of treated areas until sprays have dried.
- Allow spray to dry before allowing adults, children or pets on treated areas.
- Do not wet plants to the point of runoff or drip.
- Do not apply more than 10 times per season.
- Do not reapply within 3 days except under extreme pest pressure.
- In case of extreme pest pressure, do not reapply within 24 hours.
- For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.
- Not for use in outdoor residential misting systems.
- Do not apply when food, feed, and or/water is present.
- Do not harvest until spray has dried.

USE DIRECTIONS:

IMPORTANT: It is recommended that the final spray mix be adjusted to a pH of 5.5 to 7.0. Outside of this range, pyrethrins can degrade and the product will lose its effectiveness.

To avoid possible harm to honeybees apply in early morning to late evening hours. Pyrethrins degrade rapidly in sunlight. To ensure the best performance, coverage is key. Use spray equipment that will provide the best coverage and direct contact with as many insects as possible. Kills only at time of application. Listed insect pests must be directly contacted to be effective.

TANK MIX: It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

This product may be tank mixed with other insecticides, acaricides, fungicides, adjuvants, and wetting agents. This application should conform to accepted use precautions and directions for both products. Tank mix applications must be made in accordance with the more restrictive of label limitations and precautions. No label application rates may be exceeded. This product cannot be mixed with any product with label prohibitions against such mixing.

Prior to tank mixing, a compatibility test should be conducted using the proper proportions of products and water to ensure the physical compatibility of the mixture.

PHYTOTOXICITY NOTE: Plant safety is an important consideration when using insecticides in a greenhouse. However, it is not possible to evaluate the phytotoxicity of BIOGARD CONCENTRATE on numerous plant varieties that may react differently to insecticides in different growth stages or under varying environmental conditions. Before making widespread applications of BIOGARD CONCENTRATE, or tank mix combinations, treat a limited number of plants and observe for phytotoxicity over a 10-day period.

AGRICULTURAL APPLICATIONS		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
Growing Crops (Outdoors and in Greenhouses/Nurseries)	<p>Apply 4.5 to 15 fl. oz. per acre (333 ml to 1,242 ml/hectare) by ground equipment in sufficient water for thorough coverage.</p> <p>This product may be applied by air at the rate of 4.5 to 15 fl. oz. per acre (333 ml to 1,242 ml/hectare) in a minimum of 2 gallons (7.56L) of water.</p>	<p>Mix only enough for immediate use.</p> <p>Spraying should begin when insects first appear.</p> <p>Do not wait until plants are heavily infested.</p> <p>Do not reapply within 3 days except under extreme pest pressure.</p> <p>In case of extreme pest pressure, do not reapply within 24 hours.</p> <p>Don not harvest until spray has dried.</p> <p>Do not wet plants to point of runoff or drip.</p> <p>Do not exceed 10 applications per Season.</p> <p>Do not exceed the maximum application rate of 0.05 lbs. a.i./ acre or 17 fl. oz. BIOGARD CONCENTRATE per acre.</p> <p>Preharvest Interval (PHI) = 0 days</p>

ROOT AND TUBER VEGETABLES: Including: Arracacha, Arrowroot, Purple Arrowroot, Japanese Artichoke, Jerusalem Artichoke, Garden Beets, Sugar Beets, Edible Burdock, Edible Canna, Carrots, Cassava (bitter or sweet), Celeriac (celery root), Chayote (root), Chervil (turnip rooted), Chicory, Chufa, Dasheen, Ginger, Ginseng, Horseradish, Leren, Parsley (turnip rooted), Parsnip, Potato, Radish, Japanese Radish (Daikon), Rutabaga, Salsify, Black Salsify, Spanish Salsify, Sweet Potato, Tanier, Turmeric, Turnip, Yam (true), Yam Bean.

LEAVES OF ROOT AND TUBER VEGETABLES: Including: Garden Beet, Sugar Beet, Edible Burdock, Carrot, Cassava (bitter or sweet), Celeriac (celery root), Chervil (Turnip Rooted), Chicory, Dasheen (Taro), Parsnip, Radish, Japanese Radish (Daikon), Rutabaga, Black Salsify, Sweet Potato, Tanier, Turnip, Yam (true).

BULB VEGETABLES: Including: Garlic, Great-headed Garlic, Leek, Onion (bulb and green) Welch, Shallot.

LEAFY VEGETABLES: Including: Amaranth (Leafy Amaranth, Chinese Spinach, Tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Corn Salad, Chrysanthemum (edible-leaved), Chrysanthemum (garland), Cress (garden, water), Upland Cress (yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Fennel (Florence), Lettuce (head and leafy), Orach, Parsley, Purslane (garden & winter), Radicchio, Rhubarb, Spinach, Fine Spinach (Malabar, Ceylon), Spinach (New Zealand), Swiss Chard.

BRASSICA (COLE) LEAFY VEGETABLES: Including: Broccoli, Chinese Broccoli (Gai Lan), Broccoli Raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavallo broccoli, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.

LEGUME VEGETABLES (SUCCULENT OR DRIED): Including: Adzuki Beans, Field Beans, Kidney Beans, Lima Beans, Moth Beans, Mung Beans, Navy Beans, Pinto Beans, Rice Beans, Runner Beans, Snap Beans, Tepary Beans, Urd Beans, Wax Beans, Asparagus Beans, Black-eyed Peas, Catjang, Chinese Long Beans, Cowpeas, Crowder Peas, Southern Peas, Yardlong Beans, Broad Beans, (Fava Beans), Chick Peas (Garbanzo Beans), Guar, Jack Beans (Sword Bean), Lablab Beans (Hyacinth Bean), Lentils, Peas (Garden Peas, Field Peas, Sugar Snap Peas, English Peas, Snow Peas), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin, Sword Beans.

FOLIAGE OF LEGUME VEGETABLES: Including: Plant part of any legume vegetable included in the legume vegetable group that will be used as animal feed including any variety of Beans, Field Peas, Soybeans.

FRUITING VEGETABLES: Including: Eggplant, Ground Cherry, Okra, Pepinos, Peppers (Bell Peppers, Chili Peppers, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillos, Tomatoes.

CUCURBIT VEGETABLES: Including: Balsam Apple, Balsam Pear (Bitter Melon), Chayote (fruit), Chinese Wax Gourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Melons (including hybrids, Cantaloupe, Casaba, Golden Pershaw Melon, Crenshaw, Honeydew Melons, Honey Balls, Mango Melon, Muskmelon, Persian Melon, Pineapple Melon, Santa Claus Melon, Snake Melon), Pumpkin, Squash (summer & winter), Watermelon (including hybrids).

CITRUS FRUITS: Including: Calamondin, Citrus Citron, Citrus Hybrids, Grapefruit, Kumquats, Lemons, Limes, Mandarin (Tangerine), Orange (sweet & sour), Pummelo, Satsuma Mandarin, (Citrus spp. Includes Chironja, Tangelos, Tangors).

POME FRUITS: Including: Apple, Crabapple, Loquat, Mayhaw, Pear, Oriental Pear, Quince.

STONE FRUITS: Including: Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

SMALL FRUITS AND BERRIES: Including: Blackberry, Blueberry, Cranberry, Currant, Dewberry, Elderberry, Gooseberry, Grape, Huckleberry, Loganberry, Olallieberry, Raspberry (black & red), Strawberry, Youngberry.
TREE NUTS: Including: Almond, Beech Nut, Brazil Nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazel nut), Hickory nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut, Black and English (Persian).

ORIENTAL VEGETABLES: Including: Acerola, Atemoya, Balsam pear (bitter melon), Carambola, Japanese Artichoke, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy, Napa), Chinese Mustard Cabbage (Gai Choy), Dasheen, Ginger, Ginseng, Chinese Longbeans, Mung Beans, Citron Melon, Japanese Radish (Daikon), Chinese Spinach, Chinese Waxgourd, Cilantro, Citron Melon, Rambutan, Water Chestnut.

SUBTROPICAL FRUITS: Including: Avocado, Banana, Carob, Barbados Cherry, Cherimoya, Dates, Durian (Jackfruit), Feijoa, Figs, Guava, Kiwifruit, Lychee, Mango, Papaya, Passion Fruit, Persimmon, Pineapple, Pomegranate.

CEREAL GRAINS: Including: Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl Millet, Popcorn, Rice, Rye, Sorghum (Milo), Teosinte, Triticale, Wheat, Wild Rice.

FORAGE, FODDER AND STRAW OF CEREAL GRAINS: Including: Barley, Buckwheat, Corn (sweet and field), Millet, Proso, Oats, Pearl, Popcorn, Rice, Rye, Sorghum (milo), Teosinte, Triticale, Wheat, Wild Rice.

GRASSES FOR SEED, FORAGE, FODDER AND HAY: Including: any grass (Gramineal family, green or cured, except sugarcane and those listed in the cereal grains group) Pasture and Range Grasses, Grasses grown for hay and silage, Bermudagrass, Bluegrass, Bromegrass, Fescue, Oat hay, Orchard Grass, Forage Sorghum, Sudan Grass, Timothy.

NON-GRASS ANIMAL FEEDS: Including: Alfalfa, Velvet Bean, Clover, Kudzu, Lespedeza, Lupine, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

HERBS AND SPICES: Including: Allspice, Angelica, Anise (anise seed), Anise [star], Annatto (seed), Balm (lemon balm), Basil, Borage, Burnet, Camomile, Caper buds, Caraway, Caraway [black], Cardamom, Cassia bark, Cassia buds, Catnip, Celery seed, Chervil (dried), Chicory, Chive, Chive [Chinese], Cinnamon, Clary, Clove buds, Coriander (cilantro or Chinese parsley) (leaf), Coriander (cilantro) (seed), Costmary, Culantro (leaf), Culantro (seed), Cumin, Curry (leaf), Dill (dill weed), Dill (seed), Fennel (common), Fennel [Florence] (seed), Fenugreek, Grains of paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf), Lovage (seed), Mace, Marigold, Marjoram (includes sweet or annual marjoram, wild marjoram or oregano, and pot marjoram), Mustard (seed), Nasturtium, Nutmeg, Oregano, Mint, Paprika, Parsley (dried), Pennyroyal, Pepper [black], Pepper [white], Poppy (seed), Rosemary, Rue, Saffron, Sage, Savory [summer and winter], Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

ADDITIONAL CROPS: Including: Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Okra, Olives, Peanuts, Pineapple, Rice, Safflowers, Sesame, Sugar Cane, Sunflower, Tea.

FOR USE ON GREENHOUSE, ORNAMENTAL FLOWER AND FOLIAGE PLANTS		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
Ornamentals, Flowering and Foliage Plants, including: Including: African Violet, Ageratum, Aster, Azalea, Begonia, Calceolaria, Calendula, Calla, Camellia, Carnation, Ceanothus, Cineraria, Chrysanthemum, Coleum, Cyclamen, Cypress, Daffodil, Dahlia, Delphinium, Dogwood, Elm, Eucalyptus, Fern, Ficus, Foliage Plants, Fuchsia, Gardenia, Geranium, Gladiolus, Gloxinia, Gypsophila, Holly, Hyacinth, Hydrangea, Iris, Lily, Maidenhair Fern, Marigold, Narcissus, Palm, Pansy, Peony, Pelargonium, Petunia, Philodendron, Phlox, Pine, Pyracantha, Rhododendron, Roses, Rubber Plant, Snapdragon, Sweet Pea, Tulips, Viburnum, Wandering Jew, Yew, Zinnia and Andromeda, Arborvitae, Ash, Beech, Birch, Boxwood, Cotoneaster, Crabapple, Euonymus, Fir, Firethorn, Forsythia, Hawthorn, Hemlock, Hickory, Honey Locust, Horse Chestnut, Juniper, Larch, Laurel, Lilac, Linden, Mimosa, Myrtle, Oak, Pine, Privet, Tulip Tree, Viburnum, Willow.	Combine 16 to 32 fl. oz. of BIOGARD CONCENTRATE with 100 gallons (1.25 ml to 2.50 ml/L) of water for applications with conventional sprayers or 16 to 32 fl. oz. of BIOGARD CONCENTRATE with 10 gallons (12.5 ml to 25.0 ml/L) of water for applications with low volume mist blowers or (7-15 ml) 1/4-1/2 fl. oz. per gallon (2ml to 4ml/L) water for applications with handheld or backpack sprayers. Apply the diluted product at the rate of 3 gallons/1000 sq. ft.	Do not apply more than 1 time per day. Do not wet plants to point of runoff or drip. Do not exceed maximum application rate of 0.0036 lb ai/1000 sq. ft. or 1.12 fl. oz. BIOGARD CONCENTRATE/1000 sq. ft.

FOR USE ON AND AROUND LISTED OUTDOOR AREAS:		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill listed insects on Turf, Ornamental Plants, Gardens, Landscaping, Foundation Walls and Perimeters	Mix 1/4-1/2 fl. oz. (7-15 ml) of BIOGARD CONCENTRATE per gallon (2ml/L to 4ml/L) of water for applications with compressed air sprayers or pump driven sprayers. Apply one gallon of diluted product per 1000 sq. ft.	Do not apply more than 1 time per day. Do not wet plants to point of runoff or drip. Do not exceed maximum application rate of 0.002 lb ai/1000 sq. ft. (0.5 fl. oz. BIOGARD CONCENTRATE / 1000 sq. ft.) OR 0.10 lb ai/A (3 fl. oz. BIOGARD CONCENTRATE / Acre).

FOR USE IN VEGETABLE AND TRUCK GARDENS:		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
For commercial production of listed crops to kill listed insects.	Dilute ¼ to ½ fl. oz. of BIOGARD CONCENTRATE per gallon of water (2 ml/ L of water to 4 ml/L of water). Apply diluted solution with all types of agricultural sprayers, including compressed air sprayers or pump driven sprayers.	Do not apply more than 1 time per day. Do not wet plants to point of runoff or drip. Do not exceed maximum application rate of 0.002 lb ai/1000 sq. ft. (0.5 fl. oz. BIOGARD CONCENTRATE / 1000 sq. ft.) OR 0.10 lb ai/Acre (3 fl. oz. BIOGARD CONCENTRATE / Acre).

DIRECT SPRAY TO FRUITS IN BASKETS, ON TRUCKS OR IN PROCESSING PLANTS:		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill <u>Drosophila</u> spp., <u>Tephritid</u> spp., Fruit Flies, Vinegar Flies and other nuisance pests.	Dilute this concentrate at the rate of 1 part with 900 parts water (1 pint (0.5L) with 125 gallons (472.5L) of water or 5 ml with 10 pints (4.7L) of water). Thoroughly mix the emulsion in the spray tank and treat as follows: 1) Apply liberally to fruits and vegetables in baskets, on trucks and in plants. Use sprayers at a high pressure for applying at the rate of five or six pints (2.4L to 2.9L) of diluted spray to a 2-ton load of produce. Direct the spray for maximum coverage of the baskets or hampers. It is important to spray between and beneath the containers. 2) Spray the raw stock stacked in the yard. 3) Dip baskets in the diluted spray, after dumping the produce to kill adhering larvae and pupae.	Do not apply more than 1 time per day. Do not reapply within 7 days. Do not apply more than 10 times to sweet potatoes. Do not apply more than 0.0004 lb ai/gallon water (0.125 fl. oz. BIOGARD CONCENTRATE / gallon).

USE DIRECTIONS FOR INDOOR APPLICATIONS

Remove pets and birds and cover fish aquariums before spraying.

Kills only at time of application. Listed insect pests must be directly contacted to be effective.

Do not apply this product in patient rooms or in any rooms while occupied by the elderly or infirm. Patients should be removed prior to treatment. If application is done as a surface spray, patients may re-enter once the spray has dried. If application is done as a space spray, patient rooms should be thoroughly ventilated for 2 hours following spraying, and before returning patients to treated areas.

Do not apply in institutions (including libraries, schools, sports facilities, etc.) in the immediate area where occupants are present. Do not apply to classrooms while in use. Vacate rooms prior to treatment. If application is done as a surface spray, rooms should be thoroughly ventilated for 2 hours following spraying, and before re-entering treated areas.

FOOD AREA USE: Avoid contamination of food or feedstuffs. Do not apply directly to food. In the home all food processing surfaces, dishes and utensils should be covered during treatment or thoroughly washed before use.

SURFACE SPRAY:

FOR USE AS A SURFACE SPRAY IN LISTED INDOOR AREAS		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill accessible, exposed stages of listed crawling insects	Dilute 1-3 fluid ounces of concentrate with one gallon (8 ml to 24 ml/L) of water, mix well and apply as a coarse wetting spray at the rate of 1 gallon of spray mixture per 750 square feet (54 ml/m ²) of surface.	<p>To ensure maximum kill of listed crawling insects, spray thoroughly into all cracks, moldings, crevices, walls, floors and surfaces of bins, storage and handling areas. Particular attention should be paid to areas where moisture collects such as drains, sinks, and water pipes and around the base of heavy machinery and equipment, contacting as many insects as possible. To kill ANTS (excluding fire and Pharaoh ants), spray directly into nests, along trails, and directly on all ants observed.</p> <p>Remove or cover exposed food and water before application.</p> <p>Remove or cover dishes, utensils, food processing equipment, and food preparation surfaces, or wash them thoroughly before use.</p> <p>Do not apply more than 1 time per day.</p> <p>For articles:</p> <ul style="list-style-type: none"> - Do not wet articles to point of runoff or drip. - Do not use treated article until spray has dried. <p>Do not exceed maximum application rate of 0.056 lb ai/1000 sq. ft. (17.5 fl. oz. BIOGARD CONCENTRATE / 1000 sq. ft.).</p>

Dilution Table for Surface Spray

Fluid ounces of concentrate per gallon of solution	Pounds of pyrethrum per gallon of solution	Percent pyrethrins in solution
1	0.0032 (0.38 g/L)	0.039%
2	0.0064 (0.77 g/L)	0.078%
3	0.0096 (1.15 g/L)	0.118%
4	0.0128 (1.53 g/L)	0.159%
5	0.0160 (1.92 g/L)	0.200%
6	0.0192 (2.30 g/L)	0.242%
7	0.0224 (2.68 g/L)	0.284%
8	0.0256 (3.07 g/L)	0.328%
12	0.0380 (4.56 g/L)	0.508%
16	0.0510 (6.12 g/L)	0.702%
22	0.0700 (8.4 g/L)	1.020%

FOR FEDERALLY INSPECTED MEAT AND POULTRY PROCESSING FACILITIES

PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill accessible, exposed stages of listed crawling insects	Dilute 9 fl. oz. with one gallon (71.4 ml/L) of water and apply at the rate of 1 gallon to 750 square feet (54ml/m ²),	<p>Pay special attention to force the spray into all cracks and crevices.</p> <p>Do not make space spray applications when facility is in operation.</p> <p>Remove or cover exposed food and water before application.</p> <p>Remove or cover dishes, utensils, food processing equipment, and food preparation surfaces, or wash them thoroughly before use.</p> <p>Do not apply more than 1 time per day.</p> <p>Do not exceed maximum application rate of 0.056 lb ai/1000 sq. ft. (17.5 fl. oz. BIOGARD CONCENTRATE / 1000 sq. ft.)</p>

SPACE SPRAY IN FOOD AND NONFOOD AREAS OF LISTED INDOOR AREAS

PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
<p>Dilution with water:</p> <p>For use in mechanical fogging or spraying equipment to kill accessible stages of listed FLYING AND CRAWLING INSECTS</p>	Dilute at the rate of 1 part concentrate into 1 - 8 parts water (see table below) and mix well. Apply at the rate of 1 fl. oz. of diluted solution per 1,000 cubic feet (1.04ml/m ³) of space, filling the room with mist.	<p>Close room and shut off all air conditioners or ventilating equipment.</p> <p>Direct the space treatment upward and whenever practical, keep doors and windows closed for at least 30 minutes after application.</p> <p>Vacate treated area and ventilate before re-entry.</p>

<p>Dilution with oil:</p> <p>This concentrate may also be diluted with oil. If the product is used in a certified organic facility, check with certification regulations regarding allowed oils. Any oil should also meet Federal Food Additive Regulation requirements as defined by CFR Title 21. Conduct a small jar compatibility test by mixing a small amount of oil and concentrate and observe the physical compatibility of the mixture.</p>	<p>Dilute at the rate of 1 part of concentrate with up to 8 parts oil. Apply at the rate of 1 fl. oz. of diluted solution per 1,000 cubic feet (1.04ml/m³) of space.</p>	<p>When this product is applied as a space spray in food processing or food handling establishment applications should be confined to time periods when the plant is not in operation.</p> <p>Remove or cover exposed food and water before application.</p> <p>Remove or cover dishes, utensils, food processing equipment, and food preparation surfaces, or wash them thoroughly before use.</p> <p>Do not apply more than 1 time per day.</p>
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Dilution Table for ULV Foggers

Dilution ratio		Ratio of concentrate to solution by volume	Ratio of water to solution by volume	Pounds of pyrethrum per 1,000 cu. ft. when applied at 1 fl. oz. per 1,000 cu. ft.	Percent pyrethrin in solution
Concentrate	Water				
Undiluted		1.00	0.00	0.0032 (0.051 g/m ³)	5.00%
1	1	0.50	0.50	0.0016 (0.025 g/m ³)	2.47%
1	2	0.33	0.67	0.0011 (0.018 g/m ³)	1.65%
1	3	0.25	0.75	0.00101 (0.016 g/m ³)	1.23%
1	4	0.20	0.80	0.00064 (0.010 g/m ³)	0.99%
1	8	0.11	0.89	0.00035 (0.0056 g/m ³)	0.547%

FOR USE ON SWEET POTATOES IN STORAGE		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill Fruit Flies and Vinegar Flies	Dilute this concentrate at 1 part to 14 parts water (9 fl. oz. with one gallon (71.37ml/L) of water). Apply as a space fog with a mechanical fogger capable of producing particles of aerosol size at the rate of 1 gallon diluted spray per 100,000 cubic feet of space (40m ³ /L).	<p>Apply only when flying insects are present. Several applications may be necessary during periods of heavy infestation, but do not make more than 10 applications.</p> <p>Do not apply more than 1 time per day.</p> <p>Do not reapply within 7 days.</p> <p>Do not exceed maximum application rate of 0.001 lb ai / 1000 cu ft. (0.31 fl. oz. BIOGARD CONCENTRATE / 1000 cu. ft.)</p>

DRIED FRUIT PRODUCTS IN STORAGE OR BEING PROCESSED		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill the following stored product pests: Dried Fruit Beetle and Saw-Toothed Grain Beetle. Remove and destroy infested products.	Dilute concentrate at the rate of 1 part concentrate to 8 parts water and mix well (16 fl. oz. with one gallon of water). Disperse the solution as a fine mist in the air above the trays and shelves. Do not apply to fruit directly. If the solution is applied as a space spray, use 1 fl. oz. diluted spray per 1,000 cubic feet of space (1ml diluted spray/m ³ of space).	Immediately following application, leave the room closed off for 1 hour. Thoroughly ventilate the treated area before re-entry. Do not apply more than 1 time per day. Sweep up and destroy fallen insects. Do not apply more than 1 time per day. Do not reapply within 7 days. Do not exceed maximum application rate of 0.001 lb ai / 1000 cu ft. (0.31 fl. oz. BIOGARD CONCENTRATE / 1000 cu. ft.)

FOR USE ON STORED PRODUCTS: The product can be used to kill accessible stages of listed insects on the following stored commodities: Almond Nutmeat and Shells, Barley, Beans, Birdseed, Buckwheat, Cocoa Beans, Corn, Cottonseed, Dried Apricots, Dried Fruit, Dried Prunes, Figs, Flax, Grain Nuts, Oats, Peanut, Pistachio, Raisins, Rice, Rye, Sorghum, Tobacco, Wheat, and Walnut Nutmeat and Shells held in storage.

ON ALMONDS, PEANUTS, PISTACHIOS AND WALNUTS IN BULK OR IN BAGS		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill the following stored product insects: Almond Moths, Angoumois Grain Moths, Ants (excluding fire and Pharaoh ants), Cadelles, Cigarette Beetles, Confused Flour Beetles, Drugstore Beetles, Flat Grain Beetles, Granary Weevils, Indian Meal Moths, Lesser Grain Borers, Maize Weevils, Mediterranean Flour Moths, Merchant Grain Beetles, Red Flour Beetles, Rice Weevils, Rusty Grain Beetles, Saw-Toothed Grain Beetles and Square-necked Grain Beetles	Dilute 2.0 fl. oz. of BIOGARD CONCENTRATE per gallon (15.86ml/L) of water and apply as a coarse wet spray over the top of stored nuts or the outside surface of stacked bagged nuts at the rate of 4 gallons per 1,000 square feet (165ml/m ²). The first two applications should be applied at the rate of 4 gallons of diluted product per 1,000 square feet (165ml/m ²) and subsequent treatments should be applied at the rate of 2 gallons of diluted product per 1,000 square feet (80ml/m ²).	Apply at weekly intervals for about 6 weeks and then at 15-day intervals. Do not apply more than 1 time per day. Do not reapply within 7 days. Do not exceed the maximum application rate of 0.01 lb ai/1000 sq ft. (3.1 fl. oz. BIOGARD CONCENTRATE / 1000 sq. ft.).

FOR USE IN STORAGE SITES

This concentrate can be used to treat grain and seed in warehouse bins and trucks, cargo ships, mills, bin hoppers, elevators and conveying equipment as a clean-up prior to using them for storage. In mills and elevators, all grain- infested accumulations should be removed from the bin hoppers. All storage areas and conveying equipment should be thoroughly cleaned by sweeping out the waste grain, cobwebs and other debris from the walls and rafters as well as on the floor and door frames with special attention to material lodged in the cracks and crevices. All debris should be removed and burned to kill eggs and insects that might be present.

For farms, particular attention should be given to cleaning up around the used feed and grain bags, grain

residues from wagons, harvesting equipment and feed troughs. Newly harvested grain should not be placed in the same bin with carry-over grain, and all carry-over grain stocks that are not treated with grain protectant should be fumigated. These cleaning operations should be done within two or three weeks before harvest.

After above sanitation measures have been employed:

PRIOR TO STORAGE		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
For best results to kill stored product pests in grain and seed storage areas and stored grain and seed, treat the area when it is empty of product, as a protectant applied as commodity is put into storage, and as a surface spray once it is in storage.	Spray all areas prior to use for storage with 1 part to 22 parts water (6 fl. oz. with one gallon of water) up to 1 part to 8 parts (1 pint. (0.5 L) with one gallon (3.78L) of water). Apply at the rate of one gallon diluted product per 750 square feet (54ml/m ²) on walls, floors, ceilings and partition boards of bins, paying particular attention to forcing the spray into all cracks and crevices.	Do not reapply within 30 days. Do not exceed the maximum application rate of 0.10 lb ai/1000 bushels grain. .

FOR USE AS A GRAIN PROTECTANT		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill Indian Meal Moths, Angoumois Grain Moths and Mediterranean Flour Moths,	If the top 2-3 inches (5-7.5 cm) are infested, dilute at the rate of 1 part to 22 parts water (6 fl. oz. with one gallon of water (48ml/L). Thoroughly mix the emulsion and apply at the rate of 5 gallons diluted product (18.9L) per 1,000 bushels of grain as it is carried along a belt or as it enters the auger or elevator. Monthly inspections should be made. If the top 2 or 3 inches (5-7.5 cm) are infested, re-treat applying at the rate of 2 gallons (7.56L) of diluted material per 1,000 bushels of stored product.	This concentrate when diluted with water and sprayed directly on grains will effectively protect the grain against grain storage insects for a full season or approximately 8 months This concentrate may be used in combination with a registered fumigant for use on heavily infested stored products. Do not reapply within 30 days. Do not exceed the maximum application rate of 0.10 lb ai/1000 sq. ft. (3 fl. oz. BIOGARD CONCENTRATE / 1000 sq. ft.).

SURFACE TREATMENT OF STORED GRAIN AND SEED:		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill Indian Meal Moths, Angoumois Grain Moths and Mediterranean Flour Moths,	Dilute 1 part BIOGARD CONCENTRATE with 14 parts (8.5 fl. oz. with one gallon of water) of water and apply at the rate of 2 gallons diluted product per 1,000 square feet (80ml/m ²) of grain. Rake the mixture into the grain to a depth of 4 inches (10 cm).	Monthly inspections should be made after the grain is placed in storage. If the top two or three inches are infested, Do not reapply within 30 days. Do not exceed the maximum application rate of 0.10 lb ai/100 sq. ft. (3 fl. oz. BIOGARD CONCENTRATE / 1000 sq. ft.).

FOR DIRECT APPLICATION TO LIVESTOCK		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill Horn Flies, House Flies and Gnats	Dilute at the rate of 1.5 to 3 fl. oz. per gallon (12 ml to 24 ml/L) of water and apply to wet hair thoroughly, paying particular attention to topline, underline, flanks, withers and other infested areas.	Repeat treatment at intervals of 5 to 12 days for small insect populations or as needed when flies are emerging in large numbers. Do not apply more than 1 time per day.
To kill stable flies	Dilute at the rate of 2.5 to 4 fl. oz. per gallon (20 ml to 32 ml/L) of water and apply at a quart per adult animal to wet hair thoroughly, paying particular attention to legs, flanks, barrel, topline and other body areas commonly attacked by these flies.	Repeat treatment each week as needed. Do not apply more than 1 time per day.
To kill face flies	Dilute at the rate of 2.5 fl. oz. per gallon (20 ml/L) of water and apply using spray, which produces large wetting droplets. Apply to face of animal in the morning before releasing to pasture. Apply sufficiently to wet the face but not more than 1-1/2 fl. oz. (44 ml) of spray solution per animal.	Repeat daily as needed. Do not apply more than 1 time per day.
To kill biting and sucking lice on livestock	Dilute at the rate of 1 quart with 60 gallons (226.8L) of water (1.5 fl. oz. with 2 gallons [6 ml/L]) and spray to thoroughly wet hair of animal, including the head and brush of the tail.	Repeat treatment in 10 days to kill newly hatched lice. Do not apply more than 1 time per day.
To kill sheep "Tick" or Ked	Dilute at the rate of 1.5 to 3 fl. oz. per 4 gallons (3 ml/L to 6 ml/L) of water and thoroughly wet all portions of the body by dipping or spraying with sufficient pressure and with a nozzle adjustment to give penetration of the wool.	Treat at a rate sufficient to wet the animal. Do not apply more than 1 time per day.
To kill fleas and brown dog ticks on livestock and to obtain protection against reinfestation	Dilute at the rate of 9 fl. oz. per gallon (71 ml/L) of water and wet the animal by dipping or spraying. This product may also be used for livestock/pet quarters.	Do not spray pets. For best results against fleas and brown dog ticks on dogs and cats the kennels and/or animal quarters and bedding should be treated. Remove and destroy pet's old bedding. To reduce infestation, thoroughly spray the animals bedding and sleeping quarters. Also spray the entire inside surface of dog houses. Put fresh bedding in pet's quarters after spray has dried. Also treat dogs and cats [pets] with a registered flea and tick control product before allowing them to re-enter treated area. Do not apply more than 1 time per day.

FOR USE AS POULTRY SPRAY		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
To kill poultry lice	Use dilution of 2.5 to 4 fl. oz. of concentrate per gallon (20 ml to 32 ml/L) of water. Spray roosts, walls and nests or cages thoroughly.	It is not necessary to remove poultry from the housing unit during treatment. This should be followed by spraying over the birds with a fine mist. Do not apply more than 1 time per day.
To kill mites on poultry and in poultry houses	Dilute at the rate of 2.5 to 4 fl. oz. per gallon (20 ml to 32 ml/L) of water and spray crevices of roost poles, cracks in walls and cracks in nests where the mites hide.	This should be followed by spraying over the birds with a fine mist. Do not apply more than 1 time per day.
To kill adult darkling beetle (lesser meal worm) in poultry houses	Dilute 2.0 – 5.0 teaspoons (10 – 25 ml) of BIOGARD CONCENTRATE per gallon of water. Using a power or proportioner-type sprayer, apply a uniform spray until wet at pressures of 80 to 100 pounds per square inch to surfaces such as interior walls, roosting posts, structural support pillars, and other surfaces where adult beetles are observed. One gallon of spray mixture covers 250 – 500 square feet (23 m ² – 46 m ²). Do not contaminate food/feed or water.	For maximum effectiveness, treatments should coincide with each grow out or sanitation procedure. Indoor control can be enhanced by making perimeter treatments around the outside of buildings. To prevent immigrating adult beetles, apply a uniform band of spray 2 feet (0.6 m) up and 1–4 feet (0.3 – 1.2 m) out from the foundation. Do not apply more than 1 time per day.

FOR USE IN BARNS, DAIRIES, MILKING PARLORS, MILKING ROOMS AND POULTRY HOUSES:		
TO KILL THE FOLLOWING FLYING INSECTS		
PEST	PRODUCT RATES	USE DIRECTIONS AND NOTES
Fruit Flies, Gnats and Small Flying Moths	Dilute at the rate of 2.5 fl. oz. per gallon (19.82ml/L) of water. Apply as a fog or fine mist (at approximately 2 fl. oz. per 1,000 cubic feet of space (2.08ml/m ³), directing the nozzle for maximum coverage and above livestock and poultry toward the ceiling and upper corners of the area being treated.	<p>Remove or cover exposed food and water before application.</p> <p>When used in dairy barns or facilities: close milk tank lids to prevent contamination from spray and from dead or falling insects.</p> <p>Remove or cover milking utensils before application.</p> <p>Wash teats of animals before milking.</p> <p>Do not apply more than 1 time per day.</p> <p>For best results, close doors and windows before spraying, and keep them closed for 15 minutes immediately following application. Applicator should exit the treated area immediately, and thoroughly ventilate it before re-entry. Sweep up and destroy fallen insects.</p>

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE:

Keep this product in a tightly closed container when not in use. Store in a cool, dry (preferably locked) area that is inaccessible to children and animals. Post as a pesticide storage area. Always store pesticides in the original container. Store away from food, feed, seed, fertilizers, and veterinary supplies. Place formulations on lower shelves and dry formulations above.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Nonrefillable container. Do not reuse or refill this container.

[For containers with capacities equal to or less than 5 Gallons (18.9L)]:

Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate, for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

[Pressure rinse as follows [for containers greater than 5 Gallons (18.9L) too large to shake]: Empty the remaining contents into application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary, landfill, or by other procedures approved by state and local authorities.]

CONDITIONS OF SALE

This product conforms to the description set forth on this label and is reasonably fit for the purposes described herein when used according to the label directions and specified conditions. The manufacturer disclaims any and all other express or implied warranties of merchantability and fitness for particular purpose. Buyers and users shall assume all risk and responsibility for potential loss or damage if this product is used, stored, handled or applied in a manner inconsistent with this labeling. To the extent permitted by law, manufacturer shall not be liable for more than the purchase price for the quantity involved including incidental, consequential or special damages.