

1021-1785

12/11/2009

1/10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

DEC 11 2009

Mr. Thomas A. Lennan  
Regulatory Affairs Specialist  
McLaughlin Gormley King Company  
8810 10<sup>th</sup> Avenue N  
Minneapolis, MN 55427

RE: Notification to add the No CFC logo, the NSF (National Sanitation Foundation) logo and  
NSF listing number to label  
EPA Registration Number: 1021-1785  
Date of Submission: October 9, 2009

Dear Mr. Lennan:


The Agency is in receipt of your Application for Pesticide Notification under Pesticide  
Registration Notice (PRN) 98-10 dated, October 9, 2009, for the above mentioned product. The  
Registration Division (RD) has conducted a review of this request for its applicability under  
PRN 98-10 and finds that the actions requested fall within the scope of PRN 98-10. The label  
submitted with the application has been stamped "Notification" and will be placed in our  
records.

If you have any questions, please me directly at 703-305-6249 or Joyce Edwards of my  
staff at 703-308-5479.

Sincerely,

Linda Arrington  
Notifications & Minor Formulations Team Leader  
Registration Division (7505P)  
Office of Pesticide Programs

2/10

	United States Environmental Protection Agency Washington, DC 20460	Registration Amendment Other	OPP Identifier Number
		X	

**Application for Pesticide - Section I**

1. Company/Product Number 1021-1785	2. EPA Product Manager Richard Gebken	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) PYROCIDE® Fogging Concentrate 7446	PM# 10	
5. Name and Address of Applicant (Include Zip Code) McLAUGHLIN GORMLEY KING COMPANY 8810 TENTH AVENUE NORTH MINNEAPOLIS, MN 55427  <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____  Product Name _____

**Section - II**

<input type="checkbox"/> Amendment - Explain below.  <input type="checkbox"/> Resubmission in response to Agency letter dated _____  <input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated <b>NOTIFICATION</b> <input type="checkbox"/> "Me Too" Application. <input type="checkbox"/> Other - Explain below.
--	---

**DEC 11 2009**

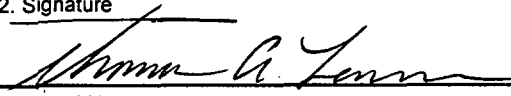
**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

Notification Pursuant to PR-Notice 98-10

**Section - III**

1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  If "Yes" Unit Packaging wgt. 4X 64 oz    6X quart 6 X 1 pint    1 X 55 Gallons	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  If "Yes" Package wgt. _____ No. per container _____	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> _____ Other (Specify) _____
3. Location of Net Contents information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 64 oz    1 Pint 55 Gallon    1 Quart	
5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product			
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Other <input checked="" type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Thomas A. Lennan	Title Regulatory Affairs Specialist	Telephone No. (Include Area Code) (763) 544-0341
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received  (Stamped)
2. Signature 		
3. Title Regulatory Affairs Specialist		
4. Typed Name Thomas A. Lennan		5. Date 10/9/2009

3/12

# MGK<sup>®</sup>

McLAUGHLIN GORMLEY KING COMPANY

8810 Tenth Avenue North • Minneapolis, MN 55427-4319 U.S.A.  
763-544-0341 • 800-645-6466 • Fax 763-544-6437 • www.mgk.com

October 9, 2009

Document Processing Desk (NOTIF)  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs (H7504P)  
Room S-4900, One Potomac Yard  
2777 South Crystal Dr.  
Arlington, VA 22202-4501

Via Courier

Subject: PYROCIDE® Fogging Concentrate 7446  
EPA Reg. No. 1021-1785  
Notification Per PR-Notice 98-10

Dear Sir or Madam:

By Notification we are adding the NSF (National Sanitation Foundation) logo and our NSF listing number to our label.

Enclosed are 2 copies of the label. One copy has changes highlighted. Also enclosed are copies of our NSF Registration and a letter dated July 28, 2004 from Frank T. Sanders, Director of the Antimicrobials Division to the NSF describing acceptable uses of NSF language on labels.

Notification of label change per PR Notice 98-10. This notification is consistent with the guidance in PR Notice 98-10 and the requirements of EPA's regulations at 40 CFR 152.46. No other changes have been made to the labeling or the Confidential Statement of Formula for this product. I understand that it is a violation of 18 U.S.C Sec. 1001 to willfully make any false statement to EPA. I further understand that if the notification is not consistent with the requirements of PR Notice 98-10 and 40 CFR 152.46 this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

If there are any questions or you need anything further, please contact this office.

Sincerely,

McLAUGHLIN GORMLEY KING COMPANY



Thomas A. Lennan  
Regulatory Affairs Specialist

Enclosure

Quality Products Since 1902



McLAUGHLIN  
GORMLEY  
KING COMPANY

PYROCID<sup>®</sup> Fogging Concentrate  
7446

8810 Tenth Avenue N. / Minneapolis, Minnesota 55427-4319 U.S.A. - Telephone (763) 544-0341

Water-based ULV

[ ] indicates optional wording or language

- |                              |                     |                         |
|------------------------------|---------------------|-------------------------|
| [Kills Mosquitoes]           | [For Use Indoors]   | [Flushing Action]       |
| [Kills Biting Flies]         | [For Use Outdoors]  | [Fast Acting]           |
| [Kills Fleas]                |                     |                         |
| [Kills Ticks]                | [Area Spray]        | [Effective]             |
| [Kills Spiders]              | [ULV Spray]         | [Quick Knockdown]       |
| [Kills Stored Product Pests] | [Contact Spray]     |                         |
| [Kills Flying Insects]       | [Space Spray]       | [Hose-End Applications] |
| [Kills Crawling Insects]     |                     |                         |
| [Kills Cockroaches]          | [In Poultry Houses] |                         |
| [Kills Ants]                 | [On Poultry]        |                         |
| [Kills Crickets]             | [On Livestock]      |                         |

**NOTIFICATION**  
**DEC 11 2009**

ACTIVE INGREDIENTS:

Pyrethrins.....	5.00%
* Piperonyl butoxide, Technical.....	25.00%
OTHER INGREDIENTS .....	70.00%
	100.00%

\* Equivalent to 20.00% (butylcarbityl) (6-propylpiperonyl) ether and 5.00% related compounds  
PYROCID<sup>®</sup>, MGK<sup>®</sup> - Registered trademarks of McLaughlin Gormley King Company

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> <li>▪ Call a poison control center or doctor immediately for treatment advice.</li> <li>▪ Have person sip a glass of water if able to swallow.</li> <li>▪ Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>▪ Do not give anything by mouth to an unconscious person.</li> </ul>
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> <li>▪ Take off contaminated clothing.</li> <li>▪ Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>▪ Call a poison control center or doctor for treatment advice.</li> </ul>
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.	

Net Contents \_\_\_\_\_

Manufactured by:  
Mc LAUGHLIN GORMLEY KING COMPANY  
8810 Tenth Avenue North  
Minneapolis, MN 55427

EPA Reg. No. 1021-1785

EPA Est. No. 1021-MN-2

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS
<b>CAUTION</b>
Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.
<u>ENVIRONMENTAL HAZARDS</u>
This product is toxic to fish and other aquatic invertebrates. Do not contaminate water when disposing of equipment wash waters. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

INDOOR AREAS for use in and around: [such as]:

Animal Areas and Quarters, Animal Shelters, Animal Control Centers, Apartments, Arcades, Attics, Auditoriums, Bakeries, Beverage Plants, Bars, Basements, Bathrooms, Boats, Bottling Plants, Breweries, Brewery Warehouses, Buildings, Buses, Cabins, Cabinets, Cafeterias, Campers, Canneries, Cattle Barns, Churches, City Missions, Circus Tents, Closets, Club Houses, Commercial Buildings, Communication Centers, Condominiums, Concession Stands, Court Houses, Crawl Spaces, Crematoriums, Dairy and Livestock Barns, Day Care Centers, Delicatessens, Department Stores, Diners, Dog Houses, Storage or Processing Areas that contain Dried Fruit Products, Drugstores, Dumpsters, Dwellings, Egg Processing Plants, Factories, False Ceilings, Freight Containers, Fruit Packing Sheds, Funeral Parlors, Garbage Bins, Garbage Cans, Garbage Compactors, Garbage Trucks, Gas Stations, Grain Elevators, Grain Harvesting and Handling Equipment, Garages, Grain Mills, Granaries, Grocery Stores, 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, Milk Rooms, Mills, Mausoleums, Meat Packing Plants, Mess Halls, Mini Storages, 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, Ships, Ship Holds, Smoke Shops, Sports Stadiums, Stables, Storage Bins (areas), Storage Areas for Food in Multi-walled Paper or Cloth Bags, Stores, Supermarkets, Swine Houses, Taverns, Textile Mills and Warehouses, Theaters, Tobacco Factories, Tobacco Warehouses, Tool Sheds, Trains, Transportation Equipment, Trucks, Truck Trailers, Tunnels, Utilities, Utility Rooms, Vending Machines, Veterinary Hospitals, Wall and Equipment Voids, Warehouses, Washrooms, Wholesale Stores, Wine Cellars, Wineries, Zoos and other similar areas.

**OUTDOOR AREAS** for use in and around: [such as]:

Alleys, Amphitheaters, Amusement Parks, Athletic Fields, (baseball, football, soccer), Back Yards, Balconies, Baseball Fields, Bleachers, Bridges, Car Washes, Campgrounds, Circuses, Construction Sites, Corrals, Courtyards, Curbs, Drive-In Restaurants, Drive-In Theaters, Dumpsters, Fair Grounds, Feedlots, Front Yards, Game Fields, Garbage Dumps, Gazebos, Golf Courses, Grandstands, Junk Yards, Kennels, Levees, Manure Piles, Outdoor Eating Establishments, Parks, Parking Lots, Patios, Playgrounds, Ranges, Recreational Areas, Rest Areas, Roadsides, Rooftops, Sanitary Sewers (Manholes), Side Yards, Side Walks, Stadiums, Tennis Courts, Truck Stops, Underpasses, Utility Rooms Outdoors, Weigh Stations, Wild Animal Parks, Wood Piles, Zoos, and other similar areas.

**FOR USE ON:** [such as]: Beefalo, Birds, Buffalo, Calves, Cattle [beef] [milking], Chickens, Donkeys, Ducks, Emus, Exotics such as European Red Deer, Geese, Horses, Lambs, Llamas, Mules, Ostrich, Oxen, Pheasants, Pigs, Ponies, Pullets, Quail, Ratites, Roosters, Sheep, Swine, and Turkeys.

**FOR THE CONTROL OF INSECTS** including: [such as]:

Almond Moths, Angoumois Grain Moths, Ants, Black Flies, Blood Sucking Lice, Boxelder Bugs, Brown Dog Ticks, Cadelles, Carpet Beetles, Cereal Beetles, Cheese Mites, Cheese Skippers, Chocolate Moths, Cigarette Beetles, Clothes Moths, Clover Mites, Cockroaches, Coffee Bean Weevils, Confused Flour Beetles, Crickets, Dark Mealworms, Darkling Beetles, Deer Flies, Deer Ticks, Dermestid Beetles, Dried Fruit Beetle, Drugstore Beetles, Earwigs, Face Flies, Firebrats, Flat Grain Beetles, Fleas, Flies, Fruit Flies, Gnats, Grain Mites, Granary Weevils, Horn Flies, Hornets, Horse Flies, Indian Meal Moths, Khapra Beetles, Lesser Grain Borers, Lesser House Flies, Mediterranean Flour Moths, Merchant Grain Beetle, Midges, Millers, Millipedes, Mosquitoes, Flying Moths, Palmetto Bugs, Pillbugs, Red Flour Beetles, Rice Flour Beetles, Rusty Grain Beetles, Saw-toothed Grain Beetles, Silverfish, Skipper Flies, Spiders, Spider Beetles, Stable Flies, Sowbugs, Ticks, Ticks that may carry and transmit Lyme Disease, Tobacco Moths, Trogloderma Beetles, Warehouse Beetles, Wasps, Waterbugs, Yellow Jackets, and Yellow Mealworms.

**DIRECTIONS FOR USE**

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

Avoid contamination of food or feedstuffs.

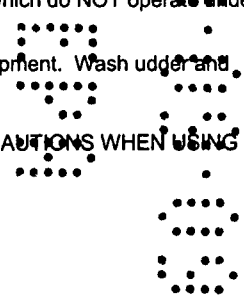
Remove pets and birds and cover fish aquariums before spraying. Avoid exposing reptiles to this product.

Do not apply space spray while food processing is underway. Cover or remove all food processing surfaces. Thoroughly wash all food processing surfaces before reuse. After spraying in bakeries, meat packing plants, food processing plants, etc., all benches, shelving, equipment, etc. where exposed food will be handled must be washed with an effective cleaning compound followed by a potable water rinse to remove all traces of contamination. Food processing operations do not have to be stopped while applying a wet spray with care and in accordance with the directions and cautions above in those establishments which do NOT operate under Federal meat, poultry, shell egg grading, and egg products inspection programs.

Do not apply directly to food, water or feed supplements. Do not contaminate milk or milk handling equipment. Wash udders and teats of dairy animals before milking.

**READ ALL DIRECTIONS COMPLETELY BEFORE USE AND FOLLOW ALL DIRECTIONS AND PRECAUTIONS WHEN USING PRODUCT.**

For best results, follow directions for specific use areas.



INDOOR USE - UNDILUTED

ULV AND SPACE SPRAY: Use in aerosol generators to kill exposed accessible stages of: Flies (including Fruit Flies), Mosquitoes, Small Flying Moths, Fleas, Gnats, Wasps, Hornets, Clover Mites, Cheese Mites, Cheese Skippers, Boxelder Bugs, Earwigs, Ants and the following common Stored Product Pests: Granary Weevils, Rice Weevils, Confused Flour Beetles, Saw-toothed Grain Beetles, Spider Beetles, Cigarette Beetles, Drugstore Beetles, Angoumois Grain Moths, Mediterranean Flour Moths, Indian Meal Moths, Tobacco Moths, Yellow Mealworms, Dark Mealworms, Grain Mites, Cadelles, and Red Flour Beetles. Close room and shut off all air conditioning or ventilating equipment. Apply at the rate of 1/2 to 1 fluid ounce concentrate per 1,000 cubic feet of space (0.52 ml to 1.04 ml/m<sup>3</sup>). Direct spray towards ceiling and upper corners of room. Leave room closed for 1/2 hour and ventilate thoroughly before re-entry.

CONTACT AND SPACE SPRAY: To kill Cockroaches, Silverfish, Earwigs, Ants, and Spiders: Use a mechanical aerosol generator or a fogger adjusted to deliver aerosol droplets. To provide maximum penetration and impingement on the insects, first, direct the spray into all crack and crevices, behind all equipment, cupboards, obstructions, or dark harborage areas, on walls and floors, underneath sinks, behind pipes and in all places that harbor insects. Contact as many insects as possible. Do not allow spray to contact stored food. Then treat as a space spray, directing the spray towards the ceiling and upper corners of room, apply at a rate of one (1) fluid ounce per 1,000 cubic feet of space (1.04 ml/m<sup>3</sup>). Vacate treated area and leave the room closed for 1 hour. Ventilate thoroughly before re-entry. Facilities and equipment in federally inspected meat and poultry plants must be washed with an effective cleaning compound and rinsed with potable water after spraying.

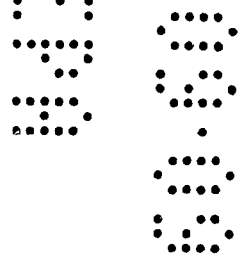
DRIED FRUIT PRODUCT STORAGE AREAS: In storage or [being processed] [in processing] for control of Almond Moths, Ants, Cereal Beetles, Chocolate Moths, Cigarette Beetles, Cockroaches, Confused Flour Beetles, Crickets, Earwigs, Flies, Fruit Flies, Fungus Gnats, Indian Meal Moths, Mediterranean Flour Moths, Red Flour Beetles, Saw-toothed Grain Beetles, Silverfish, Dried Fruit Beetles, Warehouse Beetles, and Khapra Beetles. Do not apply to fruit directly. Apply as a fine mist or fog in the air above and around the trays, bins, and shelves at the rate of 1 fluid ounce per 1,000 cubic feet of space (1.04 ml/m<sup>3</sup>). Repeat application at this dosage as required.

TREATMENT OF STORED FOOD AREAS: Foods in multi-walled bags, cloth bags or other packaging stored in such listed areas for the control of accessible adult stages of: Almond Moths, Angoumois Grain Moths, Ants, Cadelles, Cereal Beetles, Cheese Mites, Cheese Skippers, Chocolate Moths, Cigarette Beetles, Cockroaches, Confused Flour Beetles, Crickets, Dark Mealworms, Drugstore Beetles, Earwigs, Firebrats, Flies, Fruit Flies, Fungus Gnats, Grain Mites, Granary Weevils, Hide Beetles, Indian Meal Moths, Mediterranean Flour Moths, Mosquitoes, Red Flour Beetles, Rice Weevils, Saw-toothed Grain Beetles, Silverfish, Small Flying Moths, Spiders, Spider Beetles, Yellow Mealworms, Dried Fruit Beetles, Warehouse Beetles, Rusty Grain Beetles, Lesser Grain Beetles, Coffee Bean Weevils, and Khapra Beetle. Destroy, fumigate, or treat infested stored products by other effective methods using an approved product intended for this purpose. As noted above, first disperse by directing spray into cracks and crevices, corners, pallets and around stacks of packaged goods hitting as many insects as possible and then apply as a space spray at a dosage of one (1) fluid ounce per 1,000 cubic feet of room space (1.04 ml/m<sup>3</sup>). Vacate treated area and ventilate before re-entry.

ON PEANUTS, NUTS (ALMONDS & WALNUTS), BEANS, (INCLUDING COCOA), SEEDS (BIRDSEED MIXTURES, COTTONSEED & FLAXSEED) AND COPRA IN BULK, BAGS OR OTHER PACKAGING: For the control of accessible stages of: Almond Moths, Angoumois Grain Moths, Ants, Cadelles, Cereal Beetles, Cheese Mites, Cheese Skippers, Chocolate Moths, Cigarette Beetles, Cockroaches, Confused Flour Beetles, Crickets, Dark Mealworms, Drugstore Beetles, Earwigs, Firebrats, Flies, Fruit Flies, Fungus Gnats, Grain Mites, Granary Weevils, Hide Beetles, Indian Meal Moths, Mediterranean Flour Moths, Mosquitoes, Red Flour Beetles, Rice Weevils, Saw-toothed Grain Beetles, Silverfish, Small Flying Moths, Spiders, Spider Beetles, Yellow Mealworms, Dried Fruit Beetles, Warehouse Beetles, Rusty Grain Beetles, Lesser Grain Beetles, Coffee Bean Weevils, Khapra Beetles and other listed insects, apply to the surface of stored or bagged products at the rate of 1/4 fluid ounce per 1000 square feet (0.08 ml/m<sup>2</sup>). Also spray walls, floors and surfaces of bins, storage and handling areas thoroughly, being especially careful to treat cracks, crevices and similar hiding places. Then apply as a space spray by directing the spray toward the ceiling and upper corners of the area and behind any obstructions. Apply at the rate of 1 fluid ounce per 1,000 cubic feet of room space (1.04 ml/m<sup>3</sup>). Vacate treated area and ventilate before re-entry.

INDOOR USE - DILUTED

SPACE SPRAY: For use in mechanical fogging or spraying equipment to control accessible stages of Almond Moths, Angoumois Grain Moths, Ants, Cadelles, Cereal Beetles, Cheese Mites, Cheese Skippers, Chocolate Moths, Cigarette Beetles, Cockroaches, Confused Flour Beetles, Crickets, Dark Mealworms, Drugstore Beetles, Earwigs, Firebrats, Flies, Fruit Flies, Fungus Gnats, Grain Mites, Granary Weevils, Hide Beetles, Indian Meal Moths, Mediterranean Flour Moths, Mosquitoes, Red Flour Beetles, Rice Weevils, Saw-toothed Grain Beetles, Silverfish, Small Flying Moths, Spiders, Spider Beetles, Yellow Mealworms, Dried Fruit Beetles, Warehouse Beetles, Rusty Grain Beetles, Lesser Grain Beetles, Coffee Bean Weevils, and Khapra Beetles. Remove or cover exposed food and cover food-handling surfaces in edible product areas of food handling establishments. Close room and shut off all air conditioning or ventilating equipment. Dilute at the rate of 1 part concentrate into 1 to 10 parts water and mix well. Apply at the rate of 1-2 fluid ounces per 1,000 cubic feet of space (1.04 to 2.08 ml/m<sup>3</sup>), filling the room with mist. Vacate treated area and ventilate before re-entry.



Dilution Table for ULV Foggers

Dilution Ratio:					
Concentrate	Water	Fluid ounces of Concentrate Per ounce of solution volume	Fluid Ounces of water per ounce of solution volume	Pounds (0.45 Kg) of Pyrethrum Per 1,000 cu. ft. (28.32 m <sup>3</sup> ) when applied at 1 fl oz per 1000 cu. Ft (1.04 ml/m <sup>3</sup> ).	Percent Pyrethrins in Solution
Undiluted		1.00 (29.57 ml)	0.00	0.0033 (0.00148 Kg)	5.060%
1	1	0.50 (14.78 ml)	0.50 (14.78 ml)	0.00165 (0.00074 Kg)	2.530%
1	2	0.33 (9.68 ml)	0.67 (19.81 ml)	0.00110 (0.00049 Kg)	1.687%
1	2.25	0.31 (9.17 ml)	0.69 (20.40 ml)	0.00101 (0.00045 Kg)	1.557%
1	2.5	0.29 (8.57 ml)	0.71 (20.99 ml)	0.00094 (0.00042 Kg)	1.446%
1	3	0.25 (7.39 ml)	0.75 (22.18 ml)	0.00082 (0.00037 Kg)	1.265%
1	4	0.20 (5.91 ml)	0.80 (23.66 ml)	0.00066 (0.00030 Kg)	1.012%
1	5	0.17 (5.03 ml)	0.83 (24.54 ml)	0.00055 (0.00025 Kg)	0.843%
1	6	0.14 (4.14 ml)	0.86 (25.43 ml)	0.00047 (0.00021 Kg)	0.723%
1	7	0.13 (3.84 ml)	0.88 (26.02 ml)	0.00041 (0.00018 Kg)	0.632%
1	8	0.11 (3.25 ml)	0.89 (26.32 ml)	0.00037 (0.00017 Kg)	0.562%
1	9	0.10 (2.96 ml)	0.90 (26.61 ml)	0.00033 (0.00015 Kg)	0.506%
1	10	0.09 (2.66 ml)	0.91 (26.91 ml)	0.00030 (0.00013 Kg)	0.460%

EXAMPLE: To determine how much Concentrate to put into a 44 fluid ounce (1,301 ml) fogger tank to achieve a mix of 1 part Concentrate with 5 parts water, multiply 0.17 (from chart above) times 44 (fluid ounces of solution needed) = 7.48 fluid ounces (221 ml) of Concentrate (7.5 fluid ounces (221 ml) with rounding). Fill remainder of tank volume with 36.52 fluid ounces (1,079.8 ml) of water (36.5 (1,080 ml) with rounding) – to a total of 44 fluid ounces (1,301 ml).

FOR USE IN FEDERALLY INSPECTED MEAT AND POULTRY PLANTS: Dilute one part concentrate with 4 parts water and use with a ULV spraying device at the rate of one fluid ounce per 1,000 cubic feet (1.04 ml/m<sup>3</sup>) of room space. Apply the spray into all cracks and crevices in woodwork, walls, and floors, underneath sinks, behind pipes and in all places that shelter insects. Contact as many insects as possible. Before use, exposed food products and packaging materials must be covered or removed. After use, equipment and utensils must be washed with an effective cleaning compound and rinsed with potable water. Use as a space spray only when plant is not in operation. Repeat as necessary but not more than once per day. Do not reapply within one (1) day.

SURFACE SPRAY: To control accessible stages of Cockroaches, Silverfish, Beetles, and Crickets: Dilute 1–3 fluid ounces (30 ml to 89 ml) of concentrate with one gallon of water, mix well and apply as a coarse wetting spray using approximately 1 gallon of spray mixture per 750 square feet (54 ml/ m<sup>2</sup>) of surface. To ensure maximum control of listed crawling insects, spray thoroughly into all cracks, molding, crevices, walls, floors, and other surfaces of bins and storage and handling areas. [Pay] particular attention [should be paid] to areas where moisture collects such as around drains, sinks, and water pipes, around the base of heavy machinery and equipment contacting as many insects as possible.

ANTS: Spray directly into nests, along trails, and directly on all ants observed.

FOR IN TRANSIT PROTECTION: To control accessible stages of listed insects, clean and spray truck beds, boxcars, ship holds and other listed transit equipment before loading. Thoroughly treat walls and floors and spray each layer of cartons or containers lightly as stacked. Apply diluted spray at the rate of one (1) gallon per 1,000 square feet (40 ml/m<sup>2</sup>).

TREATMENT OF STORED GRAIN: To control accessible stages of Indian Meal Moths and Angoumois Grain Moths: Apply diluted spray to the surface of binned grain at a rate of 0.5 gallons per 1,000 cubic feet (7 ml/m<sup>3</sup>). Apply at monthly intervals with the first appearance of infestation. In severe infestation of flying moths, break up webbing with a rake before spraying and make a second application in two weeks.

STORAGE AREAS FOR DRIED FRUIT PRODUCTS for control of Confused Flour Beetles, Dried Fruit Beetles, Indian Meal Moths, and Saw-toothed Grain Beetles. Remove and destroy infested products. Apply diluted spray as a fine mist in the air above the trays and shelves. Do not apply to fruit directly. Use one (1) fluid ounce per 1,000 cubic feet (1.04 ml/m<sup>3</sup>) of space. Repeat application at this dosage in any given month. Leave the room closed for one (1) hour. Vacate treated areas and ventilate the area before re-entry. Sweep up and destroy fallen insects.

FOOD STORAGE AREAS containing multi-walled bags, cloth bags, and other packaging in warehouses, storage rooms, flour mills, grain elevators, granaries and other listed areas for the control of Angoumois Grain Moths, Cadellies, Confused Flour Beetles, Indian Meal Moths, Mediterranean Flour Moths, Rice Weevils, Saw-toothed Grain Beetles, Yellow Mealworms, Cheese Mites, Cheese Skippers, Cigarette Beetles, Grain Mites, Granary Weevils, Dark Mealworms, and Red Flour Beetles: Remove and destroy infested products. First disperse diluted spray by directing spray into corners, under pallets, and around stacks of packaged foods hitting as many insects as possible and then treat as a space spray. Infested stored products should be fumigated or treated by other effective methods using an approved product intended for this purpose. Use at a rate of one to two (1-2) fluid ounces per 1,000 cubic feet (1.04 ml to 2.08 ml/m<sup>3</sup>) of space. [Do not remain in] [Vacate] treated areas and ventilate area before re-entry. This application will kill exposed stages of those stored product pests listed. Sweep up and destroy fallen insects.

8/10

FOR USE ON ANIMALS: To protect: beef and dairy cattle and horses from Horn Flies, Houseflies, Mosquitoes, and Gnats, dilute 1 part concentrate with 49 parts water, mix well and apply a light mist sufficient to wet the tips of the hair. To control Stable Flies, Horse Flies and Deer Flies on animals apply two (2) fluid ounces (60 ml) per adult animal in an amount sufficient to wet the hair but not to soak the hide. Repeat treatment once or twice daily or at intervals to give continued protection. To control the motile stages of Blood Sucking Lice on beef and dairy cattle and other listed animals, apply the spray to thoroughly wet the hair. Use two (2) fluid ounces (59.14 ml) or less per animal and repeat every 2 to 3 weeks as required.

To control Poultry Lice, spray roosts, walls and nests or cages thoroughly with a dilution of one (1) part concentrate with 25 parts water, followed by spraying over the birds with a fine mist.

ANIMAL QUARTER USE - DAIRY AND BEEF BARNs, POULTRY HOUSES, SWINE HOUSING AND OTHER LISTED AREAS: For use in and around listed use areas to control accessible stages of Brown Dog Ticks, Clover Mites, Cockroaches, Crickets, Deer Flies, Earwigs, Face Flies, Firebrats, Fleas, Flies, Horn Flies, Hornets, Mosquitoes, Silverfish, Small Flying Moths, Spiders, Stable Flies, Ticks, Wasps, Yellow Jackets, Fannia Flies, and Darkling Beetles. Apply as a space spray in conventional ULV cold aerosol generator or fogger adjusted to deliver aerosol size droplets. Whenever possible perform space spray application in the late evening when insects are at rest. Apply undiluted at the rate of 0.25-1.0 fluid ounces per 1,000 cubic feet (0.26 ml to 1.04 ml/m<sup>3</sup>) of space above the animals. This concentrate may also be diluted with water at the rate of one (1) part concentrate to 10 parts water and applied at the rate of 1-2 fluid ounces per 1,000 cubic feet (1.04 ml to 2.08 ml/m<sup>3</sup>) of space above the animals. Direct spray toward the upper portions of the enclosure, above the animals, filling the room with mist or fog. Vacate treated area and ventilate before re-occupying.

To control Bedbugs and Mites in poultry houses, prepare a dilution of one (1) part concentrate to 25 parts water and spray crevices of roost poles and cracks in walls and nests where the Bedbugs and Mites hide.

FOR USE IN AUTOMATIC ULV SPRAYING SYSTEMS, IN AREAS SUCH AS ANIMAL QUARTERS, DAIRY AND BEEF BARNs, POULTRY HOUSES, SWINE HOUSING, WAREHOUSES, RESIDENTIAL BACKYARDS AND OTHER LISTED INDOOR AND OUTDOOR AREAS.

NOTE: NOT REGISTERED for use in Automatic ULV Spraying Systems in the State of New York.

Use to control, or temporarily reduce annoyance from accessible stages of Brown Dog Ticks, Clover Mites, Cockroaches, Crickets, Deer Flies, Earwigs, Face Flies, Firebrats, Fleas, Flies, Gnats, Horn Flies, Hornets, Horse Flies, Mosquitoes, Silverfish, Small Flying Moths, Spiders, Stable Flies, Ticks, Wasps, Yellow Jackets, Fannia Flies, Darkling Beetles, and other nuisance insects.

Mix 1/2 gallon (64 fluid ounces (66.56 ml) ) of concentrate in 55 gallons (208 L) of water to yield a solution of 0.046% Pyrethrins and 0.23% Piperonyl Butoxide. For high populations of insects, or when treating species that are difficult to control, mix up to One (1) gallon of concentrate in 55 gallons (208 L) of water to yield a solution of .093% Pyrethrins and 0.46% Piperonyl Butoxide. When filling tank, partially fill the system reservoir tank with water, add concentrate, and then fill rest of tank with water. System nozzles should deliver fine particle size droplets (aerosol or mist). Nozzles should have a delivery rate not to exceed 1.25 fluid ounces (1.3 ml) of solution per minute, with one (1) nozzle covering 100 square feet (9.29 m<sup>2</sup>) . Set system timer to operate in accordance with equipment directions.

Automatic Spraying System Dilution Table

A. System Tank size (in gallons)	B. Conversion Factor (Fluid ounces of Concentrate per gallon of water)	A. x B. = fluid ounces of Concentrate for specific tank size, to be mixed with water to achieve 0.046% pyrethrin solution.
1 (3.78 L)	1.16 (34.34 ml)	1.16 (9 ml/L)
15 (56.7 L)	1.16 (34.34 ml)	17 (0.60 ml/L)
20 (75.6 L)	1.16 (34.34 ml)	23 (0.45 ml/L)
30 (113.4 L)	1.16 (34.34 ml)	35 (0.30 ml/L)
55 (208 L)	1.16 (34.34 ml)	64 (0.16 ml/L)

Since high water temperatures can degrade pyrethrins, it is recommended that system tanks be sheltered or insulated from direct exposure to the sun. Use of an EPA approved antimicrobial agent is also recommended. For best performance the spray solution should be in the pH range from 5.5 to 7.0. Avoid setting up system nozzles in a manner that delivers spray solution into swimming pools or pools containing fish and other organisms that may be sensitive to Pyrethrins. Automatic systems must be programmed so as not to activate and/or release pesticides when people, pets and food or feed are present. Install a rain sensor and a wind sensor on the system to control drift and runoff. Lock the system reservoir tank and securely attach a legible copy of the label to the system reservoir tank, or on the outside of the system timer. Never use concentrate in an evaporative cooling system.

This product will control insects directly contacted by its spray solution. Since many of the targeted insects can migrate in and out of treatment areas, it is recommended that this concentrate be used as part of an Integrated Pest Management (IPM) program. Control practices such as, (but not limited to), eliminating breeding and harborage sites, combined with appropriate use of contact insecticides, Insect Growth Regulators (IGRs) and / or residual insecticides will provide the most effective control of target insects.



2/10

**OUTDOOR USE:**

To control accessible stages of listed flying insects in listed outdoor areas. If possible, [perform] space spray application [should be made] in the evening or early morning when mosquitoes are typically most active. With a ULV spraying device, spray at a dosage rate of five (5) fluid ounces of undiluted concentrate per minute up-wind of the area to be controlled. If the equipment is truck mounted, keep the speed to approximately 10 mph with a swath width of 300 feet (91.44m) .

**TEMPORARY REDUCTION OF ANNOYANCE** from Flies, Mosquitoes, and Small Flying Moths. The afore-mentioned outdoor ground application will give temporary relief of annoyance from these pests in listed outdoor areas. Direct application into tall grass and shrubbery and around lawns where these pests may hover or rest. Apply while air is still. In areas such as zoos, cover water, drinking fountains, and animal feed before use.

**TO CONTROL PESTS ON SHRUBS, FRUIT, AND SHADE TREES:**

**Pests:** Aphids, Apple & Thorn Skeletonizers, Bagworms, Bean Beetles, Cabbageworms, Codling Moths, Cutworms, European Pine Shoot Moths, Flea Beetles, Hemlock Wolly Adelgids, Holly Bud Moths, Lacebugs, Leafhoppers, Leafminers, Leafrollers, Mealybugs, Oak Loopers, Obscure Root Weevils, Omnivorous Leaf tiers, Pear Slugs, Scale Crawlers, Spider Mites, Tent Caterpillars, Thrips, Webworms and Whiteflies.

**Plants:** Birch, Crabapple, Dogwood, Douglas Fir, Elm, Euonymus, Hawthorn, Hemlock, Holly, Juniper, Lilac, Locust, Maple, Oak, Plum, Pine, Poplar, Spruce, Sycamore, Willow, and Yew.

**Mixing Instructions:** For Shrubs and Shade Trees, follow directions on applicator to obtain four (4) Tbs. (2 fluid ounces (60 ml)) concentrate per gallon of water.

1 Tablespoon (Tbs.) = 3 teaspoons (tsp)

1 fluid ounce (30 ml) = 2 Tbs.

**How to Apply:** Spray to wet plant leaves and branches until dripping.

**AROUND HOUSE FOUNDATION:**

**Nuisance Pests Outdoors:** Ants, Boxelder Bugs, Brown Dog Ticks, Chiggers, Clover Mites, Cockroaches, Crickets, Earwigs, Fleas, Flies, Millipedes, Scorpions, Sowbugs, Spiders, and Springtails.

**Mixing Instructions:** For around House Foundation follow directions on applicator to obtain four (4) Tbs. (2 fluid ounces (59.14 ml)) concentrate per gallon of water.

1 Tablespoon (Tbs.) = 3 teaspoons (tsp)

1 fluid ounce (60 ml) = 2 Tbs.

**How to Apply:** To keep insects from entering the house, spray a five (5) foot (1.52 m) band of soil around the house next to the foundation. Also spray the foundation of the house to a height of two (2) feet (0.61 m). Also, spray walks, firewood piles, garbage cans, tree trunks, into cracks and other places where insects can hide.

**STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Store in a cool, dry place. Always store pesticides in the original container. Store away from food and pet food.

**PESTICIDE DISPOSAL:**

To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry.)

**CONTAINER HANDLING:**

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill.

Triple Rinse as follows [for containers of 5 Gallons (18.9 L) or less]: 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 ¼ 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.

Triple Rinse as follows [for containers greater than 5 Gallons (18.9 L)]: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

10/10



NSF Listed. NSF No. [137606]

