

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

3/6/95
3/10/95
3/14/95
12/10/95

MAY 4 1995

Mr. Gary Hutton
HUB States Corporation
8455 Keystone Crossing
Suite 150
Indianapolis, IN 46420-4303

Dear Mr. Hutton:

Subject: Alternate Formulation and Revised Labeling
Di-Tox E
EPA Registration No. 5602-97
Your Applications Dated September 9 and October 27, 1994
and FAX Dated March 14, 1995

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable, provided that you make the labeling changes listed below before you release the product for shipment bearing the amended labeling:

1. Expand "Controls pests of household (cockroaches, ants, brown dog ticks)" to include new sites use patterns and pests on front panel. The front panel should identify where the product can be used.
2. As in our August 25, 1992 letter, place the signal word Danger on the same line as Poison.
3. Since this product is for commercial use and lists ornamentals, it could be used in nurseries thus making it subject to Worker Protection Standard (WPS). To avoid WPS requirements add the following statement: "Not for use in nurseries or commercial greenhouses."

The confidential statements of formula (CSF) dated October 27, 1994 for the alternate and basic formulations are not acceptable. We note you have received a copy of the product chemistry review dated January 25, 1995. The CSF for the alternate formulation dated March 9, 1995 is acceptable and supersedes the CSF's dated October 27, 1994. The basic formulation of record is dated April 23, 1992.

CONCURRENCES

SYMBOL							
SURNAME	<i>Lulu</i>						
DATE	<i>5-4-95</i>						

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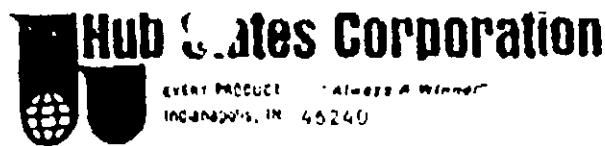
Submit three copies of your final printed labeling before you release the product for shipment. A stamped copy of the labeling is enclosed for your records.

Sincerely,

George T. LaRocca
Product Manager 13
Insecticide-Rodenticide Branch
Registration Division (7505C)

enclosure

2



DI-TOX E



CONTROL PESTS OF HOUSEHOLDS (COCKROACHES, ANTS, BROWN DOG TICKS, SILVERFISH, SPIDERS, CRICKETS, FLEAS, FIRE-ANTS, SAWTOOTH GRAIN BEETLE, FLOUR BEETLE, RICE WEEVIL, CIGARETTE BEETLE, DRUGSTORE BEETLE, INDIAN MEAL MOTH)

To Be Applied Only By or Under the Supervision of Pest Control Operators, Public Health Organizations, and Other Trained Personnel Responsible for Insect Control Programs.

ACTIVE INGREDIENTS	BY WT.
Chlorpyrifos: O, O-diethyl O(3,5,6 trichloro 2 pyridyl) phosphorothioate	12.31%
Dichlorvos: 2,2-Dichlorovinyl dimethyl phosphate	11.45%
Related compounds	0.88%
INERT INGREDIENTS*	75.38%
Total 100.00%	

*Contains aromatic petroleum distillates EPA EST. NO. 5602-SC-01 EPA REG. NO. 5602-97

Apply a small amount of material in a 25% or 5% solution directly into cracks and crevices using equipment capable of delivering a pin stream of insecticide in points between different elements of construction, between equipment and floors, openings leading to voids and hollow spaces in walls, equipment legs and bases, conduits, motor housings, junctions of switch boxes where cockroaches, ants, crickets, firebrats and silverfish hide. Prior to application de-energize electrical equipment. After application, allow time for oil to evaporate before starting motors or placing switches in the "ON" position. Use as oil base solution only around electrical equipment. Do not use water emulsion in conduits, motor housing and electrical switch boxes. Aids in the control of pantry pests (exposed stages of sawtooth grain beetle, flour beetle, rice weevil, cigarette beetle, drugstore beetle and Indian Meal Moth) which come into contact with treated surfaces. Care should be taken to avoid depositing the product onto exposed surfaces or introducing the material into the air. Avoid contamination of food processing surfaces.

APPLICATIONS OF THIS PRODUCT IN THE FOOD AREAS OF FOOD HANDLING ESTABLISHMENTS, OTHER THAN AS A CRACK AND CREVICE TREATMENT ARE NOT PERMITTED.

INDOOR APPLICATION Residential and Commercial
Use as a spot treatment by applying as a coarse spray or with a paint brush to areas where cockroaches normally are found. These areas include dark corners of rooms and closets, at the base of walls, in cracks in the wall, behind baseboards, behind and beneath sinks, refrigerators, stoves and cabinets and around drainpipes. Spraying unloading docks and outside areas (when no food is exposed) where insects congregate will aid in preventing re-infestations. Good sanitation and proper disposal of wastes is essential in any effective insect control program. **NOTE:** A period of 4 to 7 days after treatment is normally required for maximum effect on cockroaches, ANTS, CRICKETS, FLEAS, FIREBRATS, SILVERFISH, SPIDERS. Use a 0.25% spray to control light infestations and a 0.5% spray to quickly reduce heavy infestations. Apply as a coarse spray or with a paint brush to localized areas where these pests are found or normally occur, including dark corners of rooms and closets, cracks and crevices in walls, along and behind baseboards, beneath

and behind sinks, stoves, refrigerators and cabinets around plumbing and other utility installations. For ants apply to ant trails, also around doors and windows and wherever else these pests may find entrance. **BROWN DOG TICKS.** Thoroughly apply a 0.5% spray as a spot treatment to infested areas such as pet beds and resting quarters; nearby cracks and crevices, along and behind baseboards; window and door frames and localized areas of floor and floor covering where these pests may be present. Old bedding of pets should be removed and replaced with clean, fresh bedding after treatment. **DO NOT TREAT PETS WITH THIS PRODUCT.**

STORAGE AND DISPOSAL

- 1) PROHIBITIONS: DO NOT CONTAMINATE WATER (FOOD OR FEED) BY STORAGE OR DISPOSAL. OPEN DUMPING IS PROHIBITED.
- 2) PESTICIDE DISPOSAL: PESTICIDE SPRAY MIXTURE OR RINSE THAT CANNOT BE USED OR CHEMICALLY REPROCESSED SHOULD BE DISPOSED OF IN A LAND FILL APPROVED FOR PESTICIDES OR BURIED IN A SAFE PLACE AWAY FROM WATER SUPPLIES.
- 3) CONTAINER DISPOSAL: TRIPLE RINSE (OR EQUIV ALENT) AND OFFER FOR RECYCLING, RECONDITIONING OR DISPOSAL IN APPROVED LANDFILL OR BURY IN A SAFE PLACE.
- 4) GENERAL: CONSULT FEDERAL STATE OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES.

CAUTION TEST CARPET SAMPLE PRIOR TO SPRAYING. MAY DISCOLOR. Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE expressed or implied, extends to the use of the product contrary to label instructions or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes risk of any such use.

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS (& DOMESTIC ANIMALS)
DANGER**

Fatal if swallowed, inhaled or absorbed through skin. Do not wear contaminated clothing. May be irritating to eyes and skin. Wash thoroughly after handling. Do not breathe vapor or spray mist. Keep away from food, feed stuffs and water supplies. Do not let children or pets contact treated area until thoroughly dry. Mix the concentrate outdoors or in a well ventilated room. Wash all contaminated clothing with soap & hot water before reuse. Wear natural rubber gloves, protective clothing, goggles and mask or respirator of the type approved jointly by the Mining Enforcement and Safety Administration (formerly the US Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 30 CFR Part 11 for protection against DDVP when handling the concentrate to prepare emulsions.

PHYSICAL AND CHEMICAL HAZARDS

- Do not use or store near heat or open flame.
- Do not use this product in or on electrical due to the possibility of shock hazard.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

SPOTTREATMENT ONLY

Di-Tox E insecticide mixes readily with water or oil. Dilute the required amount of Di-Tox E in water or in a base oil such as deodorized kerosene or No. 2 fuel oil. Mix according to the following table to obtain the desired concentration: 0.25% Chlorpyrifos and 0.25% DDVP Vapors or 0.5% Chlorpyrifos and 0.5% DDVP Vapors. Use the higher concentrations of DDVP Vapors and Chlorpyrifos to quickly reduce heavy cockroach infestations. Use the lower concentration of DDVP Vapors and Chlorpyrifos on light infestations.

	WATER EMULSION		Mixing Ratio
	Amount Required per Gallon	oz	
0.25% Chlorpyrifos	1.00	1.00	1:1
0.25% DDVP Vapors	2.20	2.20	1:1
0.5% Chlorpyrifos	2.00	2.00	1:1
0.5% DDVP Vapors	4.40	4.40	1:1
	OIL SOLUTION		Mixing Ratio
	Amount Required per Gallon	oz	
0.25% Chlorpyrifos	1.00	1.00	1:1
0.25% DDVP Vapors	2.20	2.20	1:1
0.5% Chlorpyrifos	2.00	2.00	1:1
0.5% DDVP Vapors	4.40	4.40	1:1

FOOD HANDLING ESTABLISHMENTS: Areas other than in the residences in which exposed food is held, prepared, packaged, or held for sale. **FOOD AREAS:** application limited to FLOOR AND CREVICE TREATMENT ONLY. Do not use in areas where food is stored, prepared, or held for sale. Do not use in areas where food is processed, prepared, or held for sale. Do not use in areas where food is exposed and available for consumption. Do not use in areas where food is held, prepared, packaged, or held for sale.

**DANGER KEEP OUT OF REACH OF CHILDREN
POISON**



STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center immediately. If possible, vomiting should be induced under medical supervision. Drink one or two glasses of water and induce vomiting by touching the back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air. Apply respiration if indicated.

IF ON SKIN: Remove contaminated clothing and wash affected areas with soap and water.

IF IN EYES: Flush eyes for at least 15 minutes with water. Seek medical attention immediately.

NOTE TO PHYSICIAN: DI-TOX E is a cholinergic anticholinergic. Treat symptomatically. Antidote is atropine. 2 PAM - this anticholinergic may be administered intravenously with Atropine.

REG. BY HUB STATES CORP INDIANAPOLIS, IN

ACCEPTED with COMMENTS in EPA Letter Dated

BEST COPY AVAILABLE

MAY 4 1995

Do not wear contaminated clothing when handling to eye, and skin. Wash thoroughly after handling. Do not breathe vapor or spray mist. Keep away from food, feed stuffs and water supplies. Do not let children or pets contact treated area until thoroughly dry. Mix the concentrate outdoors or in a well-ventilated room. Wash all contaminated clothing with soap & hot water before reuse. Wear rubber gloves, protective clothing, goggles and mask or respirator of the type approved jointly by the Mining, Enforcement and Safety Administration (formerly the U.S. Bureau of Mines) and by the National Institute for Occupational Safety and Health under the provisions of 30 CFR Part 11 for protection against DDVP when handling the concentrate to prepare emulsions.

Other Trained Personnel Responsible for Insect Control Programs

ACTIVE INGREDIENTS	BY WT.
Chlorpyrifos: O, O-dimethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate	12.31%
Dichlorvos: 2,2-Dichloroethyl dimethyl phosphorothioate	11.45%
Related compounds	0.86%
INERT INGREDIENTS*	75.38%
Total 100.00%	

496

PHYSICAL AND CHEMICAL HAZARDS

1. Do not use or store near heat or open flame.
2. Do not use this product in or on electrical due to the possibility of shock hazard.

DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

SPOT TREATMENT ONLY

Di-Tox E insecticide mixes readily with water or oil. Dilute the required amount of Di-Tox E in water or in a base oil such as deodorized kerosene or No. 2 fuel oil. Mix according to the following table to obtain the desired concentration of 0.25% Chlorpyrifos and 0.25% DDVP Vapona or 0.5% Chlorpyrifos and 0.5% DDVP Vapona insecticides. Use the higher concentrations of DDVP Vapona and Chlorpyrifos to quickly reduce heavy cockroach infestations. Use the lower concentration of DDVP Vapona and Chlorpyrifos on light infestations.

Di-Tox E Concentration	WATER EMULSION		Mixing Ratio
	Amount Required (oz)	Amount of Water (gals)	
0.25% Chlorpyrifos & 0.25% DDVP Vapona	2.23 Oz	1.00	1:10
0.5% Chlorpyrifos & 0.5% DDVP Vapona	5.43 Oz	1.00	1:20

Di-Tox E Concentration	OIL SOLUTION		Mixing Ratio
	Amount Required (oz)	Amount of Oil (gals)	
0.25% Chlorpyrifos & 0.25% DDVP Vapona	2.5 Oz	1.00	1:10
0.5% Chlorpyrifos & 0.5% DDVP Vapona	5.0 Oz	1.00	1:20

FOOD HANDLING ESTABLISHMENTS: Places other than private residences in which exposed food is held, prepared, packaged or served. **FOOD AREAS APPLICATION LIMITED TO CRACK AND CREVICE TREATMENT ONLY.** Includes areas for ice making, storage, packing, canning, bottling, wrapping, drying, preparing, edible waste storage and enclosed processing systems (mills, dairies, feed lots, etc.). Spraying areas (when food is exposed) and location of infestation also would include a food area.

*Contains aromatic petroleum distillates EPA EST. NO. 5602-SC-01 EPA REG. NO. 5602-97

Apply a small amount of material in a 25% or 5% solution directly into crack and crevices using equipment capable of delivering a pin stream of insecticide in points between different elements of construction, between equipment and floors, openings leading to voids and hollow spaces in walls, equipment legs and bases, conduits, motor housings, junctions of switch boxes where cockroaches, ants, crickets, firebrats and silverfish hide. Prior to application de-energize electrical equipment. After application, allow time for oil to evaporate before starting motors or placing switches in the "ON" position. Use oil base solution only around electrical equipment. Do not use water emulsion in conduits, motor housing and electrical switch boxes. Aids in the control of pantry pests (exposed stages of sawtooth grain beetle, flour beetle, rice weevil, cigarette beetle, drugstore beetle and Indian Meal Moth) which come into contact with treated surfaces. Care should be taken to avoid depositing the product onto exposed surfaces or introducing the material into the air. Avoid contamination of food processing surfaces. **APPLICATIONS OF THIS PRODUCT IN THE FOOD AREAS OF FOOD HANDLING ESTABLISHMENTS, OTHER THAN AS A CRACK AND CREVICE TREATMENT ARE NOT PERMITTED.**

INDOOR APPLICATION: Residential and Commercial. Use as a spot treatment by applying as a coarse spray or with a paint brush to areas where cockroaches normally are found. These areas include dark corners of rooms and closets, at the base of walls, in cracks in the wall, behind baseboards, behind and beneath sinks, refrigerators, stoves and cabinets and around drainpipes. Spraying unloading docks and outside areas (when no food is exposed) where insects congregate will aid in preventing re-infestations. Good sanitation and proper disposal of wastes is essential in any effective insect control program. **NOTE:** A period of 6 to 7 days after treatment is normally required for maximum effect on cockroaches. **ANTS, CRICKETS, FLEAS, FIREBRATS, SILVERFISH, SPIDERS:** Use a 0.25% spray to control light infestations and a 0.5% spray to quickly reduce heavy infestations. Apply as a coarse spray or with a paint brush to localized areas where these pests are found or normally occur, including dark corners of rooms and closets, cracks and crevices in walls, along and behind baseboards, beneath

and behind sinks, stoves, refrigerators and cabinets around plumbing and other utility installations. For ants apply to ant trails, also around doors and windows and wherever else these pests may find entrance. **BROWN DOG TICKS:** Thoroughly apply a 0.5% spray as a spot treatment to infested areas such as pet beds and resting quarters, nearby cracks and crevices, along and behind baseboards, window and door frames and localized areas of floor and floor covering where these pests may be present. Old bedding of pets should be removed and replaced with clean, fresh bedding after treatment. **DO NOT TREAT PETS WITH THIS PRODUCT.**

STORAGE AND DISPOSAL

- 1) PROHIBITIONS: DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL. OPEN DUMPING IS PROHIBITED.
- 2) PESTICIDE DISPOSAL: PESTICIDE SPRAY, MIXTURE OR RINSE THAT CANNOT BE USED OR CHEMICALLY REPROCESSED SHOULD BE DISPOSED OF IN A LAND FILL APPROVED FOR PESTICIDES OR BURIED IN A SAFE PLACE AWAY FROM WATER SUPPLIES.
- 3) CONTAINER DISPOSAL: TRIPLE RINSE (OR EQUIVALENT) AND OFFER FOR RECYCLING, RECONDITIONING, OR DISPOSAL IN APPROVED LANDFILL OR BURY IN A SAFE PLACE.
- 4) GENERAL: CONSULT FEDERAL STATE OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES.

CAUTION: TEST CARPET SAMPLE PRIOR TO SPRAYING. MAY DISCOLOR. Seller warrants that the product conforms to its chemical description and is reasonably fit for the purpose stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE expressed or implied extends to the use of the product contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to seller and buyer assumes risk of any such use.

DANGER KEEP OUT OF REACH OF CHILDREN

POISON

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Call a physician or Poison Control Center or, if necessary, if possible vomiting should be induced under medical supervision. Drink one or two glasses of water and induce vomiting by touching the back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF INHALED: Remove victim to fresh air. Apply respiration if indicated.

IF ON SKIN: Remove contaminated clothing and wash affected areas with soap and water.

IF IN EYES: Flush eyes for at least 15 minutes with water. Call a physician immediately.

NOTE TO PHYSICIAN: Di-Tox E is a cholinesterase inhibitor. Treat symptomatically. Atropine may be effective in antagonizing 2-PAM is also suitable and may be administered intravenously with Atropine.

REG. BY THE STATE OF INDIANA IN

ACCEPTED with COMMENTS in EPA Letter Dated

MAY 4 1995
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.

696

European chafers,
and Japanese beetle
only (larvae)

2-4 fl. ozs.

Apply in mid May or as recommended by your Agricultural Extension Service specialist for your area. For wire grubs spray when grubs are young and actively feeding near the soil surface, usually during late July and August or as recommended by your local Agricultural Extension Service specialist for your area. Immediately after spraying irrigate the treated area with 1/2 to 1 inch of water to wash the insecticide into the underlying soil.

pillars, fall webworms, grasshoppers, mites, orange striped oakworms, spittlebugs, whiteflies, yellow necked caterpillars, cutworms, leafhoppers, mealybugs, nimosa webworms, red humped caterpillars, thrips (exposed)	2 fl. ozs.	6.4 fl. ozs.	2 quarts
ash borers, lilac borers, scale crawlers, oak lecanium, pine needle, tea white peach.	4 fl. ozs.	12.8 fl. ozs.	1 gal.

PESTS OF LAWNS AND OTHER ORNAMENTAL RECREATIONAL TURF GRASS AREAS:

Use product to control the pests listed in the following table by application at the recommended dosage and in accordance with directions given below. Dilute product in enough water to obtain complete and uniform coverage of pest infested areas and apply as a coarse, low pressure spray using suitable application equipment. Thoroughly water immediately after treatment to wash the insecticide into the turf, except as noted. For best results, the lawn should be moist at time of treatment.

DANGER (LAWN AND ORNAMENTAL PLANT PESTS): Keep children and pets off treated areas, until spray has dried. Keep out of lawn and garden fishpools and other bodies of water. Fish may be killed if their waters are contaminated with this product. Do not apply when weather conditions favor drift from areas treated.

DIRECTIONS FOR USE (Cont'd)

NATIVE ELM BARK BEETLE: Prevent of Overwintering. To prevent the adult beetle from overwintering in uninfected trees and to reduce beetle population in disease free areas, dilute 5 1/3 oz. of product per gallon of water and apply to the bottom 9 feet of the trunk. Wet the trunk thoroughly, but do not spray to runoff. Care should be taken to apply the spray right to the base of the root flare. Application can be made with either a backpack mist blower or a hydraulic pressure sprayer from spring through early fall. Prevention of Branch and Twig Feeding on High Value Elm Trees. To reduce the twig and branch feeding on uninfected trees deemed to be high in value dilute 5 1/3 oz. of product per gallon of water and apply to the tree crown. Application should be made in the spring or early summer using a sprayer that will give thorough coverage to the tree crown.

AREA CONTROL OF TICKS AND CHIGGERS: Use product to control ticks and chiggers infesting non-crop land areas such as roadsides, footpaths, and trails, picnic and camping sites, parks and other recreational areas where these pests are present and create a nuisance or possible health problem. Apply product in water at the rate of 1 pint per acre (equivalent to 2 fl. ozs. per 2700 sq. ft.) using a hydraulic sprayer, mist applicator, knapsack sprayer or other suitable hand or power spray equipment. Treat low underbrush, grassy areas, weeds, and ground surface and debris using enough spray volume to obtain thorough coverage usually 40 to 100 gallons per acre.

DANGER (AREA CONTROL OF TICKS AND CHIGGERS): Do not allow public use of treated areas during application or until spray has dried. Do not apply when weather conditions favor drift from treated areas. Do not apply where runoff into lakes, streams, ponds, or other bodies of water is likely to occur. Fish and crustaceans may be killed if their waters are contaminated with this product.

PEST CONTROL IN MEAT PACKING AND FOOD PROCESSING PLANTS, FOOD STORAGE AREAS, RESTAURANTS, AND OTHER FOOD HANDLING ESTABLISHMENTS (PLACES OTHER THAN PRIVATE RESIDENCES IN WHICH EXPOSED FOOD IS HELD, PROCESSED, PREPARED OR SERVED).

For residual control of ants, cockroaches, millipedes, silverfish, spiders, waterbugs, and to aid in control of saw-toothed grain beetle (exposed stage) mix 2 2/3 ounces of concentrate in 1 gallon of water or for heavy infestation mix 5-1/3 ounces of concentrate in 1 gallon of water. If oil solution is used, dilute 1 ounce of concentrate in 1 gallon of base oil, or for heavy infestation 2 ounces in 1 gallon of base oil.

Non-Food Areas: Include garbage rooms, lavatories, floor drains (to sewers), entries and vestibules, offices, locker rooms, machine rooms, storerooms, garages, mop closets and storage (after washing and mopping). Apply to baseboard areas, under water pipes, under desks behind and beneath sinks, lockers, showers, toilets and other areas where insects hide in the high humidity.

Food Areas: LIMITED TO AREA AND SERVICE TREATMENT ONLY.

Apply a coarse spray of product as a pre-treatment to areas between different sections of a building or between building sections. Apply to walls, ceilings, floors, and other surfaces. Apply to baseboard areas, under water pipes, under desks behind and beneath sinks, lockers, showers, toilets and other areas where insects hide in the high humidity.

Food Areas: LIMITED TO AREA AND SERVICE TREATMENT ONLY. Apply a coarse spray of product as a pre-treatment to areas between different sections of a building or between building sections. Apply to walls, ceilings, floors, and other surfaces. Apply to baseboard areas, under water pipes, under desks behind and beneath sinks, lockers, showers, toilets and other areas where insects hide in the high humidity.

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