# Pest-Kote

# **SPECIMEN LABEL**

PYRETHRINS | GROUP 3A INSECTICIDE

PEST-KOTE® is a Multi-Purpose Insecticide ● Formulated with 3D-IPNS Application Technology

Designed to deliver the insecticide to the pest
 Patent Pending



3D-IPNS application technology helps keep insect in treated zone 3D-IPNS application technology increases the contact between the insect and insecticide

- For indoor and outdoor food use
- For indoor and outdoor use on ornamental plants and landscape ornamentals
- For use on Ornamentals, Fruits and Flowers
- Multi-purpose miticide
- Use up to Day Before Harvest
- Residential and commercial use
- For indoor and outdoor use as a premise spray

Unique formulation improves the coverage and contact of other insecticides that are mixed with this product

ACTIVE INGREDIENTS:
Pyrethrins

This product contains 0.0845 lbs. Pyrethrins per Gallon of PEST-KOTE®

#### STOP - READ THE LABEL BEFORE USE

# KEEP OUT OF REACH OF CHILDREN WARNING / AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See **Back Panel** for additional precautionary statements.

#### **FIRST AID**

#### If in eyes:

- 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

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific Time (PT), seven days a week. During other times, call the poison control center at 1-800-222-1222.

**NET CONTENTS:** 1 Quart (946.4 ml)

Distributed by: 3D BioSciences, LLC. 2101 Mystic Ridge Rd Knoxville. TN 37922

EPA Reg. No. 92035-1-97839 EPA EST# 88746-GA-1





#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**WARNING:** Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear protective eyewear (goggles, face shield, or safety glasses). 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 reuse.

#### **ENVIRONMENTAL HAZARDS**

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

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 actively visiting the treatment area.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean highwater mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Care must be taken to avoid runoff. Do not contaminate water when disposing of equipment wash-waters or rinsate.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Materials that are chemical-resistant to this product are listed below.

Applicators and other handlers who may be exposed to the dilute and/or concentrate through application or other tasks must wear:

- Long-sleeve shirt and long pants;
- Chemical-resistant gloves made of Barrier Laminate, Nitrile Rubber > 14 mils, Neoprene Rubber > 14 mils, or Viton > 14 mils;
- Shoes plus socks; and
- Protective eyewear (goggles, face shield, or safety glasses).

#### **USER SAFETY REQUIREMENTS**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent material that have been drenched or heavily contaminated with the product's concentrate. Do not reuse them.

#### **USER SAFETY RECOMMENDATIONS**

Users should: Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.



#### **KILLS INSECTS SUCH AS:**

Annual Bluegrass Weevil House Flies\*\*\* Earwigs Scale insects Ants\* Eastern Tent Caterpillar Japanese Beetle Scaly leg mite **Aphids** Elm Leaf Beetle Katydids Sciarid flies Armyworms European Pine Tip Moth Lace Bugs Silverfish Bagworm Fall Webworm Leafhopper Skippers Leafrollers Bed bugs Firebrats Sowbugs Leaftiers Blister Beetles Fireworms Stink Bugs Brown Marmorated Stink Bug Flea Beetles Loopers Spiders\*

CankerwormsForest Tent CaterpillarLygus Mealy BugsSpotted LanternflyCaterpillarsFungus GnatsMillipedesTarnished Plant Bug

Chicken (red) mites Fruit Flies Mites – Spider and Russet **Thrips** Cockroaches\*\* Grasshoppers Mushroom Flies Vinegar Flies Codling Moth Greenhouse Thrips Northern fowl mite Webworms Crickets Gypsy Moth (adults & larvae) Phorid flies Whiteflies

Crane Flies Harlequin Bug Psyllids

Depluming mite Heliothis spp. (Ag. pests) Red Cinnamon mites

# **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read entire label. Use strictly in accordance with label precautionary statements and directions.

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

IMPORTANT: Read entire DIRECTIONS FOR USE before using PEST-KOTE®.

#### 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.

<sup>\*</sup>Does not include public health pests such as fire, harvester, carpenter or pharaoh ants, and black widow, brown recluse or hobo spiders.

<sup>\*\*</sup>Includes German cockroaches (*Blattella germanica*), American cockroaches (*Periplaneta americana*), Oriental cockroaches (*Blatta orientalis*), and Turkestan cockroaches (*Blatta lateralis*).

<sup>\*\*\*</sup>Includes deltamethrin-resistant house flies



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:

- Coveralls over long-sleeve shirt;
- Chemical-resistant gloves made of Barrier Laminate, Nitrile Rubber ≥ 14 mils, Neoprene Rubber ≥ 14 mils, or Viton ≥ 14 mils;
- · Shoes plus socks; and
- Protective eyewear (goggles, face shield, or safety glasses).

#### USE RESTRICTIONS AND PRECAUTIONS

- Do not remain in the treated area. Exit area immediately and remain outside the treated area until aerosols, vapors and/or mists have dispersed.
- Do not reapply within 3 days, except during extreme pest pressure
- In case of extreme pest pressure, do reapply within 24 hours.
- 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.
- Keep unprotected persons out of treated areas until sprays have dried.
- Do not apply directly into sewers or drains, or to any area like a gutter where drainage to storm sewers, water bodies, or aquatic habitat can occur. Do not allow the product to enter any drain during or after application
- Do not make applications during the rain.
- Not for use in outdoor residential misting systems (whether indoor or outdoor).
- Not for use in outdoor metered release devices.
- Do not wet plants to the point of run-off or drip.
- Do not harvest until spray has dried.
- Do not apply more than 10 times per season.
- Do not release spray at a height greater than 4 feet above the ground or crop canopy.
- Do not contaminate food or feedstuffs.

When used in indoor food handling/processing facilities:

- Cover or remove exposed food; cover food processing surfaces or clean after treatment with a suitable detergent, rinse with potable water before use. Do not apply more than 1 time per day.
- Remove or cover dishes, utensils, food processing equipment and food preparation surfaces, or wash them before use.
- Remove or cover exposed food and drinking water before application.



#### **USE RESTRICTIONS AND PRECAUTIONS (continued)**

When used in indoor food handling/processing facilities:

- Cover or remove exposed food; cover food processing surfaces or clean after treatment with a suitable detergent, rinse with potable water before use. Do not apply more than 1 time per day.
- Remove or cover dishes, utensils, food processing equipment and food preparation surfaces, or wash them before use.
- Remove or cover exposed food and drinking water before application.

When used in food processing and food storage sites:

- Do not apply directly to food.
- Do not apply while food processing is underway.
- Foods should be removed or covered during treatment.
- All food processing surfaces and equipment should be covered or washed with an effective cleaning compound followed by a potable water rinse.
- All food processing surfaces, dishes and utensils should be covered during treatment or thoroughly washed before use. Remove pets, birds and cover fish aquariums before application. Take care when using on surfaces susceptible to damage and/or stains (e.g., mattresses, carpet, furniture). Treat a small area to ensure damage and/or stain does not occur before larger application.
- All outdoor applications must be limited to direct application to pests using spot or crack and crevice treatments only, except for the following permitted uses:
  - Treatment of vegetation, around structures;
  - Applications to lawns, turf and other vegetation;
  - o Applications to building foundations, up to a maximum height of 3 feet.
- All outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches
  and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack and
  crevice applications, only.

**ENTRY RESTRICTIONS:** For Surface Spray Use: Do not enter or allow adults, children, or pets to enter treated areas until sprays have dried.

# PEST-KOTE® is a contact spray and works only through contact action.

Mix PEST-KOTE® with water for spray applications and dilute mixture can be applied with conventional hydraulic and air-blast sprayer (including backpack).



# APPLICATION INSTRUCTIONS

BUFFER WATER TO PH RANGE OF 5.0 to 7.5

COMPRESSED AIR/HYDRAULIC SPRAYERS: For surface applications apply as a course, wet spray at the specified dilution rates listed below. For crack and crevice applications, place the tip of the applicator at or into the crack, crevice or void to be treated apply product at the rate of one second per foot. Apply in such a manner as to limit dripping and runoff on surfaces and plants.

HOSE END SPRAYERS: Dilute according to the specific directions for use. Shake sprayer to fully mix the product.

LOW-VOLUME SPRAYERS: Dilute according to dilution table or specific directions for use. The nozzle(s) should be directed into the plant canopy to get good penetration and coverage, maintain the appropriate distance from the plants to avoid blast damage. The operator should visualize that all the air within the canopy must be replaced by the air from the blower.

USED AS A TANK MIX: This product can be tank mixed with other insecticides and acaricides. 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. Do not exceed label application rates as if mixing stand alone. Add PEST-KOTE® at the specified dilution rate to the mix containing the other product(s).

Prior to tank mixing, conduct a compatibility test using the proper proportions of products and water to ensure the physical compatibility of the mixture. This product cannot be mixed with any product with label prohibitions against such mixing.

PEST-KOTE® should not be used in combination with or closely following the fungicide Captan applications due to foliage injury risk.

#### PLANT SAFETY INFORMATION

Not all plant species, varieties, and cultivars have been tested for tolerance to this product or pesticide treatments preceding or following those of this product.

Local conditions can also influence plant tolerance and may not match those under which testing was conducted. Test the product on a sample of the plants to be treated to ensure that a phytotoxic response will not occur prior to large-scale use. Because many cultivars within a plant species vary in tolerance to chemical applications and growing conditions, the grower must recognize these differences and test

the product accordingly. At a minimum, always test a small group of representative plants for tolerance to this product under local growing conditions and before large-scale use.



Grower assumes responsibility for testing species suitability under local growing conditions by treating a small number of plants at the specified rate. At a minimum, this should include evaluating treated plants for 2-3 days following treatment for possible injury or other effects. To the extent consistent with applicable law, by applying this product, the user assumes responsibility for any crop damage or other liability associated with factors beyond the manufacturer's control, such as weather, presence of other materials, and manner or use of application. Follow all restrictions and limitations on this label.

Under certain circumstances some plants are less tolerant to this product. [See table "Plants known to be less tolerant to PEST-KOTE®".] Special attention is required for applications to these crops. Product applications should first be tested at the lowest rate. All higher application rates must also be tested on a small number of plants before making large-scale treatments.

#### Plants known to be less tolerant to PEST-KOTE®

# FLOWERS/ORNAMENTALS -Chrysanthemum (some varieties) -Gerbera -Pelargonium (e.g. geraniums) -Ornamental Asparagus FRUIT -Apple -Pear VEGETABLES -Cucurbit (e.g. gourds) -Leafy vegetables with delicate leaves (e.g., lettuce) -Pepper -Tomato HERBS with delicate leaves (e.g., basil)

# PESTICIDE RESISTANCE MANAGEMENT

PEST-KOTE® 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 PEST-KOTE® or other Group 3A insecticides.

To delay insecticide resistance, consider:

- Avoiding the consecutive use of PEST-KOTE® and 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.

**Used in Combination with other Insecticides:** PEST-KOTE® may be combined with other insecticides and acaricides where resistance may be a problem. See additional tank mix direction under Application Instructions.

# <u>AGRICULTURAL USE</u>

# **GROWING CROPS (OUTDOORS AND INDOORS)**

## **General Precautions and Restrictions for use on growing crops:**

## For food crops growing outdoors in agricultural setting:

- Pest pressure determines retreatment need.
- Do not apply more than 10 times per season.
- Re-apply at intervals of 5-7 days as needed. Following the third consecutive application, reapply after a minimum of 14 days.
- Do not harvest until spray has dried.
- Do not wet plants to the point of runoff or drip.
- Buffer spray water to pH range of 5.0 to 7.5.
- Apply by ground only; Do not apply by air

#### For food crops growing indoors:

- Do not apply more than 10 times per season.
- Re-apply at intervals of 5-7 days as needed. Following the third consecutive application, reapply after a minimum of 14 days.
- Do not harvest until spray has dried.
- Do not wet plants to the point of runoff or drip.

#### Kills Insects:

Ants\*, Aphids, Apple Maggots, Armyworms, Artichoke Plume Moths, Asparagus Beetles, Bagworms, Bean Beetles, Beet Armyworms, Blister Beetles, Boll Weevils, Brown Marmorated Stink Bug, Cabbage Loopers, Cankerworms, Carrot Weevils, Caterpillars, Chinch bugs, Clover Mites, Clover Weevils, Codling Moths, Colorado Potato Beetles, Corn Earworms, Crane Flies, Crickets, Cross-striped Cabbageworms, Cucumber Beetles, 12-spotted Cucumber Beetles, Cutworms, Diamondback Moth Larvae, Earwigs, Eastern Tent Caterpillars, Elm Leaf Beetles, European Corn Borers, European Pine Tip Moths, Fall Webworms, Firebrats, Fireworms, Flea Beetles, Forest Tent Caterpillars, Fruit Flies, Fruit tree Leafrollers, Fungus Gnats, Grain Mites, Other Mites, Grape Leafhoppers, Grapeleaf Skeletonizers, Grasshoppers, Green Fruitworms, Green Peach Aphids, Greenhouse Thrips, Gypsy Moths (adults & larvae), Harlequin Bugs, Heliothis sp., Hornworms, Imported Cabbageworms, Indian Meal Moths, Japanese Beetles, Katydids, Lace Bugs, Leafhoppers, Leafrollers, Leaftiers, Loopers, Lygus, Mealybugs, Mediterranean Flour Moths, Mexican Bean Beetles, Millipedes,



Mites (Spider and Russet), Mushroom Flies, Navel Orangeworms, Onion Maggots, Pear Psylla, Phorid Flies, Plant bugs, Potato Leafhoppers, Psyllids, Red Cinnamon Mites, Rice Weevils, Sawtoothed Grain Beetles, Scale insects, Sciarid Flies, Silverfish, Skippers, Sowbugs, Spiders\*, Spotted Lanternfly, Stink Bugs, Tarnished Plant Bugs, Thrips, Tobacco bud worm, Tobacco flea beetle, Tobacco hornworm, Tomato hornworms, Vinegar flies, Webworms, and Whiteflies

\*Does not include public health pests such as fire, harvester, carpenter and pharaoh ants, or black widow, brown recluse or hobo spiders.

**Indoor Greenhouse Foliar Applications:** Refer the application tables below for application rates for each crop grouping. If necessary, reapply to maintain pest suppression thresholds. The reapplication interval should be no less than 5-7 days. Following the third consecutive application, reapply after a minimum of 14 days. Apply using sufficient volumes to ensure thorough coverage of upper and lower leaf surfaces unless otherwise noted.

**Outdoor Foliar Applications:** Refer to the application tables below for specific application rates for each crop grouping. Typically, the dilute product is applied at a rate of 100 gallons per acre. Repeat applications if required (within 5-7 days) to maintain effective kill. Use in sufficient water for thorough coverage of upper and lower leaf surfaces unless otherwise noted. However, application rates can vary according to specific application equipment and plant size.

# PEST-KOTE® Indoor Application Rate Chart for Specific Crops

Indoor/Greenhouse Grown Small Treated Areas (square feet) Mix PEST-KOTE® as directed, spray volumes will treat 2000 sq. ft. Use sufficient volumes to ensure thorough foliage coverage.

Crops	Application Rate	PEST- KOTE®: per 2000 sq. ft.	Minimum Spray Volume (gallons)	Use Directions
Vegetables, Fruits	Low	⅓ fl. oz.	2	B.,
and Berries	High	½ fl. oz.	2	Dilute in at least 2 gallons of water or up to 4 gallons
Cucumbers		1⁄4 fl. oz.	2	of water, depending on foliage density, to treat
Tomatoos Ponnors	Low	<sup>1</sup> / <sub>8</sub> fl. oz.	2	2000 sq ft
Tomatoes, Peppers	High	¼ fl. oz.	2	·

Indoor/Greenhouse Grown Large Treated Areas (acres) Mix PEST-KOTE® as directed, spray volumes will treat 1 acre. Use sufficient volumes to ensure thorough foliage coverage.

Crops	Application Rate	PEST- KOTE <sup>®</sup> : per acre	Minimum Spray Volume (gallons)	Use Directions
Vegetables, Fruits	Low	3 fl. oz.	50	D'I ( . ' ( I ( 50
and Berries	High	9 ½ fl. oz.	50	Dilute in at least 50 gallons of water or up to
Cucumbers		5 ½ fl. oz.	50	100 gallons of water,
Tomatoes, Peppers	Low	2 ¾ fl. oz.	50	depending on foliage density, to treat one acre.
Tomatoes, Peppers	High	5 ½ fl. oz.	50	donoity, to trout one doro.

This specimen label is intended for use only as a guide in providing general information regarding the directions, warning and cautions associated with the use of this product. As with any pesticide, always follow the label instructions on the package before using.



# PEST-KOTE® Outdoor Application Rate Chart for Specific Crops

Outdoor Large Treated Areas (acres) Mix PEST-KOTE® as directed, spray volumes will treat 1 acre. Use sufficient volumes to ensure thorough foliage coverage.

Crops	Application Rate	PEST- KOTE <sup>®</sup> per acre	Spray Volume (gallons)	Use Directions	
Fruit trees (excluding	Low	20 fl. oz.	100	Dilute. in 100 gallons of water to treat very	
pear), tree nuts, small fruits and berries	High	24 fl. oz.	100	large canopies, per one acre	
Pears and Apples during growing season (Due to a risk of pear leaf injury and apple fruit injury— avoid spraying in spring until about 2-3 weeks after flowering)		17 fl. oz.	100	Dilute in 100 gallons of water to treat very large canopies, per one acre	

**Outdoor Large Treated Areas (acres)** Mix PEST-KOTE® as directed, spray volumes will treat 1 acre. Use sufficient volumes to ensure thorough foliage coverage.

Crops	Application Rate	PEST- KOTE <sup>®</sup> per acre	Spray Volume (gallons)	Use Directions
Vegetables, all (excluding tomatoes,	Low	13 fl. oz.		
peppers, cucumbers, melons, eggplants)	High	19 fl. oz.		Dilute in 100 gallons of
Tomatoes, peppers	Low	6 fl. oz.	100	water to treat very large canopies, per one
Tomatoes, peppers	High	9 fl. oz.		acre
Cucumbers, Melons,	Low	13 fl. oz.		
Eggplants	High	15 ½ fl. oz.		
Cereal grains (all)		23 1/3 fl. oz.	100	Dilute in 100 gallons of water to treat very large canopies, per one acre
Dormant Spray used on overwintering pests of fruit trees		32 fl. oz.	100	Dilute in 100 gallons of water to treat very large canopies, per one acre



**Outdoor Large Treated Areas (acres)** Mix PEST-KOTE® as directed, spray volumes will treat 1 acre. Use sufficient volumes to ensure thorough foliage coverage.

Crops	Application Rate	PEST- KOTE® per acre	Spray Volume (gallons)	Use Directions
Forage, Fodder and Straw of Cereal Grains		74/0		
Grasses for Seed, Forage, Fodder and Hay	Low	7 ½ fl. oz.	100	Dilute in 100 gallons of water, depending on
Non-Grass Animal Feeds				foliage density, per one acre
Herbs and Spices Tobacco Additional Crops	High	25 fl. oz.	100	

#### **CROPS WITHIN EACH CROP GROUPING:**

Root and Tuber Vegetables: 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, 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, Skirret, Sweet Potato, Tanier, Turmeric, Turnip, Yam (true), Yam Bean.

Leaves of Root and Tuber Vegetables: 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:** (Allium spp.): Garlic, Great-headed Garlic, Leek, Onion (dry bulb and green), Onion, Welsh, Shallot.

Leafy Vegetables: Amaranth (Leafy Amaranth, Chinese Spinach, Tampala), Arugula, Cardoon, Celery, Chinese Celery, Celtuce, Chervil, Cilantro, 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, Vine Spinach (Malabar, Indian), Spinach (New Zealand), Swiss Chard.

**Brassica (Cole) Leafy Vegetables:** Broccoli, Chinese Broccoli (Gai Lan), Broccoli raab (Rapini), Brussels Sprouts, Cabbage, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens.



Legume Vegetables (Succulent Or Dried): 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, Blackeyed Peas, Catjang, Chinese Longbeans, Cowpeas, Crowder Peas, Southern Peas, Yardlong Beans, Broad Beans (Fava Beans), Chickpeas (Garbanzo Beans), Guar, Jackbean (Sword Bean), Lablab Bean (Hyacinth Bean), Lentils, Peas (Edible Pod Pea, Garden Peas, Field Peas, Sugar Snap Peas, English Pea, Snow Pea), Pigeon Peas, Soybeans, Sweet Lupin Beans, White Lupin Beans, White Sweet Lupin, Sword Bean.

**Foliage of Legume Vegetables:** Plant parts 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:** Eggplant, Ground Cherry, Okra, Pepino, Pepper (Bell Pepper, Chili Peppers, Cooking Peppers, Pimentos, Sweet Peppers), Tomatillo, Tomato.

**Cucurbit Vegetables:** Balsam Apple, Balsam Pear (Bitter Melon), Chayote, Chinese Waxgourd (Chinese preserving melon), Chinese Cucumber, Citron Melon, Cucumber, Gherkin, Edible Gourds, Muskmelons (including hybrids, Cantaloupe, Casaba, Crenshaw, Golden Pershaw Melon, 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: Apple, Crab Apple, Loquat, Mayhaw, Pear, Oriental Pear, Quince.

**Stone Fruits:** Apricot, Cherry (sweet & sour), Nectarine, Peach, Plum, Prune, Chickasaw Plum, Damson Plum, Japanese Plum, Plumcot.

**Small Fruits and Berries:** 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 (hazelnut), Hickory nut, Macadamia Nut (Bush Nut), Pecan, Pistachio, Walnut, Black and English (Persian).

**Oriental Vegetables:** Acerola, Atemoya, Balsam Pear (bitter melon), Carambola, Chinese Broccoli (Gai Lan), Chinese Cabbage (Bok Choy, Napa), Chinese Longbeans, Chinese Mustard Cabbage (Gai Choy), Chinese Spinach, Chinese Waxgourd, Cilantro, Citron Melon, Dasheen, Ginger, Ginseng, Japanese Artichoke, Japanese Radish (Daikon), Mung Beans, Rambutan, Water Chestnuts.

**Subtropical Fruits:** Avocado, Banana, Carob, Barbados Cherry, Cherimoya, Dates, Durian (Jackfruit), Feijoa, Figs, Guava, Kiwifruit, Lychee, Mango, Papaya, Passion Fruit, Paw Paw, Persimmon, Pineapple, Pomegranate.



Herbs and Spices: Allspice, Angelica, Anise (Anise seed), Annatto, Balm, Basil, Black Caraway, Borage, Burnet, Caper Buds, Caraway, Cardamom, Cassia bark, Cassia buds, Catnip, Celery Seed, Chamomile, Chervil dried, Chives, Chinese Chive, Clary, Clove Buds, Coriander (cilantro or Chinese parsley leaf), Coriander (cilantro seed), Costmary, Cilantro, Cumin, Curry Leaf, Dill (dill weed), Dill (seed), Fennel (Italian and Sweet), Fenugreek, Grains of Paradise, Horehound, Hyssop, Juniper berry, Lavender, Lemongrass, Lovage (leaf & seed), Mace, Marigold, Sweet Marjoram, Wild Marjoram, Mustard (seed), Nasturtium, Nutmeg, Parsley, Oregano, Mint, Paprika, Parsley, Pennyroyal, Pepper (black & white), Poppy seed, Rosemary, Rue, Saffron, Sage, Savory, Summer and Winter Savory, Sweet Bay (Bay Leaf), Tansy, Tarragon, Thyme, Vanilla, Wintergreen, Woodruff, Wormwood.

**Additional Crops:** Artichoke, Asparagus, Avocado, Coffee, Cotton, Hops, Jojoba, Mushroom, Okra, Peanuts, Pineapple, Safflowers, Sesame, Sugarcane, Sunflowers, Tea, Tobacco.

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

**Forage, Fodder and Straw of Cereal Grains:** 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:** Any grass, Gramineal family (green or cured) except sugarcane and those listed in the cereal grains group that will be fed to or grazed by livestock, all pasture and range grasses and grasses grown for hay or silage, Bermudagrass, Bluegrass, Bromegrass, Fescue.

**Non-Grass Animal Feeds:** Alfalfa, Velvet Bean, Clover, Kudzu, Lespedeza, Lupin, Sainfoin, Trefoil, Crown Vetch, Milk Vetch.

# ORNAMENTAL CROPS FOR SALE

Trees, shrubs, flowers, foliage plants

Apply PEST-KOTE® to control pests (refer to Table "Kills Insects Such As") on ornamental plants.

#### Kills Insects:

Ants\*, Aphids, Brown Marmorated Stink Bugs, Flea Hoppers, Leafhoppers, Japanese Beetles, Katydids, Lace Bugs, Leafhoppers, Psylla, Psyllids, Scale insects, Spider Mites, Spotted Lanternfly, Stink Bugs, Thrips, and Whiteflies.

\*Does not include public health pests such as fire, harvester, carpenter and pharaoh ants.

#### **Use Sites:**

Greenhouse and outdoor-grown ornamental crops for sale:

- Bedding plants
- Containerized and ball and burlap plants
- Cut flowers
- Evergreens
- Flowering plants (to minimize phytotoxicity only apply when out of bloom)
- Foliage plants
- Ground covers
- Ornamental trees and shrubs
- Perennials



PEST-KOTE® is a contact spray that works only when sprayed directly on the target pest. Good spray coverage of all plant sites where pests are feeding is necessary for control.

Re-apply 1-2 times at intervals of 7-10 days as needed. Pest habits and level of pest pressure determine retreatment need.

Mix PEST-KOTE® with water for spray applications. The dilute mixture can be applied using conventional hydraulic and sprayers (including backpack). Refer to the "Application rates for ornamentals" table for the appropriate application rate.

# PEST-KOTE® Application rates for ornamentals

**Small Treated Areas (square feet)** Mix PEST-KOTE® as directed, spray volumes will treat 2000 sq. ft. Use sufficient volumes to ensure thorough foliage coverage.

Crops	Application Rate	PEST- KOTE® per 2000 sq. ft.	Minimum Spray Volume (gallons)	Use Directions
Troop Shrubs	Low	1/3 fl. oz.	2	Dilute in at least 2 gallons of water or up to 4 gallons of water, depending on
Trees, Shrubs	High	½ fl. oz.	2	foliage density, to treat 2000 sq ft,
Roses		¼ fl. oz.	2	Dilute in at least 2 gallons of water or up to 4 gallons of water, depending on foliage density, to treat 2000 sq. ft.
Other ornamental plants		1/8 fl. oz.	2	Dilute in at least 2 gallons of water or up to 4 gallons of water, depending on foliage density, to treat 2000 sq ft

**Large Treated Areas (acres)** Mix PEST-KOTE® as directed, spray volumes will treat one acre. Use sufficient volumes to ensure thorough foliage coverage.

Crops	Application Rate	PEST- KOTE® per acre	Minimum Spray Volume (gallons)	Use Directions
Troop Shrubs	Low	7 fl. oz.	50	Dilute in at least 50 gallons of water, or up to 100 gallons of water for very large
Trees, Shrubs	High	12 fl. oz.	50	canopies, to treat one acre.
Roses	Low	6 ½ fl. oz.	50	Dilute in at least 50 gallons of water, or up to 100 gallons of water for dense
Ruses	High	8 1/8 fl. oz.	50	foliage, to treat one acre.
Other ornamental plants		3 ¾ fl. oz.	50	Dilute in at least 50 gallons of water, or up to 80 gallons of water for dense foliage, to treat one acre

This specimen label is intended for use only as a guide in providing general information regarding the directions, warning and cautions associated with the use of this product. As with any pesticide, always follow the label instructions on the package before using.



BEDDING, CUT FLOWER, FOLIAGE, PERENNIAL AND TROPICAL PLANTS: African Violet, Ageraturm, Angelonia, Alstroemeria, Aster, Azalea, Begonia, Cacti, Calceolaria, Calendula, Calla, Camellia, Carnation, Ceanothus, Cineraria, Chrysanthemum, Coleus, Cyclamen, Cypress, Daffodil, Dahlia, Delphinium, Dianthus, Fern, Ficus, Foliage Plants, Fuschia, Gardenia, Geranium, Gladiolus, Gloxinia, Gypsophila, Hibiscus, Holly, Hyacinth, Hydrangea, Impatiens, Iris, Lilies, Maidenhair Fern, Marigold, Narcissus, Palm, Pansy, Pelargonium, Peony, Petunia, Herbacious Perennials, Philodendron, Phlox, Pyracantha, Roses, Rubber Plant, Snapdragon, Stock, Sweet Pea, Tropicals, Tulips, Violas, Wandering Jew, Zinnia

WOODY ORNAMENTALS, TREES, SHRUBS AND EVERGREENS: Andromeda, Arborvitae, Ash, Aspen, Beech, Birch, Boxwood, Cotoneaster, Cottonwood, Crabapple, Dogwood, Elm, Euonymus, Fir, Firethorn, Forsythia, Flowering Cherry, Flowering Pear, Hawthorn, Hemlock, Hickory, Hibiscus, Holly, Honey Locust, Horse Chestnut, Juniper, Larch, Laurel, Lilac, Linden, Maple, Mimosa (Silk Tree), Myrtle, Oak, Pine, Planetree, Privet, Red Bud, Rhododendron, Roses, Tulip Tree, Viburnum, Willow, Yew.

#### MUSHROOM PRODUCTION HOUSES

For control of fungus gnats, mushroom flies (Phorid flies, Sciarid flies) and red cinnamon mites.

CASING SOIL IN MUSHROOM HOUSES: Apply to the casing soil at a rate of 13 ¼ fl. oz. per 8000 square feet with a suitable amount of water to evenly spread across room (typically 13 ¼ fl. oz. mixed in to 25 to 50 gallons water). Application can be made directly to casing soil using a water pump and watering nozzle. Timing of application can be from day zero of casing until the formation of mushroom pinheads. May be applied up to 2 times during case hold, with a 4 day interval between applications. Product can also be used between breaks/flushes before the formation of pinheads for the next break/flush. Maintain water pH of 5 to 6.

PREMISE SURFACES IN MUSHROOM HOUSES: Apply PEST-KOTE® to control accessible, exposed stages of fungus gnats and mushroom flies. Dilute 1 part of PEST-KOTE® with 100 parts of water (1 ¼ fl. oz. per gallon) and apply directly on the observed pest at the rate of 1 gallon per 750-800 square feet of dilute spray. Repeat application as necessary.

# **NON-AGRICULTURAL USE**

#### NONAGRICULTURAL 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 people (or pets) to enter the treated areas until sprays have dried.



#### **TURF GRASS**

# Turf Grass Lawns and Golf Course Tees, Greens, Fairways and Roughs:

Used to Control Insect Pests on Golf Courses and Lawns in Landscaped Areas Around Residential, Institutional, Public, Commercial and Industrial Buildings, Parks, Recreational Areas and Athletic Fields.

Appy PEST-KOTE® to control the following insects:

For control of accessible, exposed stages of Annual bluegrass weevil, Ants\*, Armyworms, Brown Marmorated Stink Bugs, Crickets, Cutworms, Earwigs, Grasshoppers, Japanese beetles (adult), Millipedes, Mites, Pillbugs, Sod webworms, Sow bugs, Spotted Lanternfly, Stink Bugs, Bluegrass billbug (adult), Chinch bugs, Black turfgrass ataenius (adult), Chiggers.

\*Does not include public health pests such as fire, harvester, carpenter and pharaoh ants.

For turf grass, combine 12 ½ fl. oz. of PEST-KOTE® with 50 gallons of water. Apply the dilute mix at a rate no less than 50 gallons per acre with conventional hydraulic sprayers or compressed air sprayers.

# PEST-KOTE® Application rates for turf grass

**Small Treated Areas (square feet)** Mix PEST-KOTE® as directed, spray volumes will treat 2000 sq. ft. Use sufficient volumes to ensure thorough foliage coverage.

Crop	Application Rate	PEST-KOTE®: per 2000 sq. ft.	Spray Volume (gallons)	Use Directions
Turf grass		½ fl. oz.	2	Use no less than 2 gallons per 2000 sq. ft

Large Treated Areas (acres) Mix PEST-KOTE® as directed, spray volumes will treat 1 acre. Use sufficient volumes to ensure thorough foliage coverage.

Crop	Application Rate	FI. oz. of PEST-KOTE® per acre	Spray Volume (gallons)	Use Directions
Turf grass		12 ½ fl. oz.	50	Use no less than 50 gallons per acre

Apply directly to pest.

Re-apply 1-2 times at intervals of 7-10 days as needed.

Pest habits and level of pest pressure determine retreatment need.



# POULTRY AND LIVESTOCK SPRAY

For use in animal housing facilities, poultry houses or coops, cattle, sheep, hogs, goat and dairy facilities, horse stables.

Pest pressure determines retreatment need.

Do not apply when food, feed and/or water is present. Prior to spray, cover or remove food. Cover food processing surfaces or clean after treatment and before use. Do not apply more than one time per day.

# To Control Arthropod Pests on Poultry and in Poultry Houses or Coops:

FOR TREATMENT IN POULTRY HOUSES or COOPS: dilute 1 part of PEST-KOTE® with 100 parts of water (1 ¼ fl. oz. per gallon) and apply as a mist (medium droplet size) to immediate surroundings of poultry houses {or}[coops] to control insects: darkling beetles, chicken (red) mites, scaly leg mite and depluming mite. [Thoroughly apply spray to roosts, walls and nests or cages.] Apply to premises [indoors and outdoors] where arthropod pests may be harboring at a rate of 5 gallons per 2000 square feet.

**Application rates for poultry house sprays:** 

**Poultry House** {or}[Coops] Spray Mix PEST-KOTE® as directed. Spray volumes will treat 2000 sq. ft. Use sufficient volumes to ensure coverage.

Use	PEST- KOTE®	Spray Volume (gallons)	Use Directions
Poultry Houses or Coops	1 ¼ fl. oz.	1 gallon	Apply at a rate of 5 gallons per 2000 sq. ft.

FOR TREATMENT ON POULTRY AS A DIRECT SPRAY: Dilute 1 part of PEST-KOTE® with 150 parts of water (1 fl. oz. per gallon) and apply solution directly to birds at a rate of 1 gal per 25 birds (5 fl. oz. per bird). To control insects: darkling beetle, poultry lice, chicken (red) mites, scaly leg mite and depluming mite, spray the birds directly. For poultry lice concentrate spray to penetrate feathers under the wing. For scaly leg mite, focus sprays directly on poultry legs and feet.

#### **Application rates for poultry sprays**

Poultry Spray M	Poultry Spray Mix PEST-KOTE® as directed, spray volumes will treat 25 birds.				
Use	PEST-KOTE®	Spray Volume	Use Directions		
Poultry	1 fl. oz.	1 gallon	Apply at a rate of 1 gallon dilute spray per 25 birds (5 fl. oz. per bird).		

This specimen label is intended for use only as a guide in providing general information regarding the directions, warning and cautions associated with the use of this product. As with any pesticide, always follow the label instructions on the package before using.



**TO CONTROL NORTHERN FOWL MITE:** For maximum control, apply a 0.6% concentration of PEST-KOTE® (3/4 fl. oz. per gallon) at a rate of 5 fl. oz. of solution per bird using a tank sprayer with a hand-held wand. Penetrate the feathers around the vent with spray application focused on the vent (cloaca) area of the bird. Use power sprayer at no less than 120-125 psi. More attention must be given to individual birds when using low-pressure equipment. Repeat when necessary.

# To Control Biting and Sucking Lice on Livestock:

Dilute 1 part of PEST-KOTE® with 100 parts of water (1 ¼ fl. oz. per gallon) and apply as a mist (medium droplet size) to animals to control biting and sucking lice on cattle, horses, sheep, goats, and hogs. Spray thoroughly to wet the hair of the animal including the head and brush of the tail. Repeat applications in 10 days to kill newly hatched lice. Close milk bulk tank lids to prevent contamination from spray and from dead or falling insects. Remove or cover milking utensils before application. Wash teats of animals before milking.

#### Application rates for livestock sprays

Livestock Spray Mix PEST-KOTE® as directed, adjust spray volumes to thoroughly wet the area being treated.

Use	PEST-KOTE®	Spray Volume	Use Directions
Livestock	1 ¼ fl. oz.	1 gallon	Using the appropriate dilution listed in table, apply to thoroughly wet the area being treated.

#### MITICIDE USE ON BIRDS

#### FOR THE CONTROL OF MITES ON BIRDS SUCH AS:

#### **Bird Mites\***

Leg and face or scaly leg or scaly face mites: (Knemidokoptes pilae)

Depluming mites: (Knemidocoptes gallineae)
Depluming mites: (Knemidocoptes gallineae)
Depluming mites: (Neocnemidocoptes gallinae)

Skin mites: Sarcoptiform Mange (*Myialges nudus*)

Feather and Quill mites: (Syringophilus hipectinatus)
Chicken (red) mites: (Dermanyssus gallinae)
Skin and Feathers: (Harpyrynchus spp.)

\*Mite pest claims do not include the public health mite pest species known as Chiggers (*Trombicula* spp.).



#### To Control Mites on Birds and Bird Habitats

PEST-KOTE® is a product designed to control different species of mites on birds and their aviary habitat. Mites of birds include, but are not limited to, the following species:

- Leg and face or scaly leg or scaly face mites: (Knemidokoptes pilae)
- Depluming mites: (Knemidocoptes gallineae)
- Depluming mites: (Knemidocoptes laevis)
- Depluming mites: (Neocnemidocoptes gallinae)
- Skin mites: Sarcoptiform Mange (Myialges nudus)
- Feather and Quill mites: (Syringophilus hipectinatus)
- Chicken (red) mites: (Dermanyssus gallinae)
- Skin and Feathers: (Harpyrynchus spp.)

Apply PEST-KOTE® to control topical mites on birds: **PEST-KOTE®** can be applied to the aviary / bird cage while the birds are present. PEST-KOTE® is degradable. PEST-KOTE® works only through contact with the target mites. Good spray coverage of all sites where mites are found is necessary for control.

#### **APPLICATION PROCEDURE**

Before application, PEST-KOTE® should be diluted to a concentration of 1% in water. This is equivalent to 1 teaspoon PEST-KOTE® to 17 fl. oz. water. Apply the dilute solution at a volume of 0.3 fl. oz. per square foot.

#### **Initial Application**

- 1. Remove and dispose the litter laying on the bottom of aviary/bird cage.
- 2. Unplug, remove and clean (decontaminate) any electrical devises, immerse them in PEST-KOTE® diluted working solution.

PEST-KOTE® should be applied using hand-operated or mechanical sprayers (LV). First, remove all electrical devices light switches and heating elements, (these will have to be decontaminated before returning to the aviary/bird cage). Then, spray floor, walls, ceiling, grates and ventilation ducts as well as all permanent equipment inside the bird habitat. The dilute spray product can be applied in the presence of the birds, to all places where mites gather and where the eggs are laid.

- Bird's direct surrounding, especially their favorite roosts
- Floor area directly under roost
- Walls, ceiling, ventilation ducts and all the cracks and crevices
- If the mites are observed in the locations other than the aviary/bird cage, spray the closest surrounding areas.

Leave birds in cage. Remove food and water before application. Spray directly on birds from a distance of 12 to 18 inches. Avoid the bird's eyes and face. Do not wet cages or aviary surfaces to the point of runoff or drip.



# **Subsequent Application**

- Apply PEST-KOTE® again 4-7 days after initial application (do not treat more than 2 days per week). The aim of this second application targets the new generation of active mites that have recently hatched from their eggs. Reapply PEST-KOTE® before mites become parasitic and start laying a fresh batch of eggs.
- 2. In case of severe infestations with birds, and to prevent re–infestations, reapply the dilute PEST-KOTE® spray monthly.
- 3. Practice good sanitation by treating new birds before introducing them into the aviary/bird cage.

# Mixing and application rates of PEST-KOTE® for birds and bird habitats

Use Sites	PEST-KOTE®: Water	Amount dilute spray per treated area	
Bird habitats - Aviary / Bird Cage Birds - Passerine and other pet birds	1 tsp: 17 fl. oz.	0.3 fl. oz./sq ft 4 fl. oz./13 sq ft	

Amount of PEST-KOTE® and water used to create 1% dilute spray solution for treatment of birds and aviary/bird cage area.

	Water (fl. oz.)	Treated area (sq. ft.)	
PEST-KOTE®			
1/4 tsp	4	13	
½ tsp	8	25	
1 tsp	16	53	
2 tsp	34	105	

PEST-KOTE® works only through contact action. Good spray coverage of all sites where mites are found is necessary for control.

Re-apply 1-2 times at intervals of 4-7 days as needed. Do not treat more than 2 days per week. Pest pressure determines retreatment frequency.



#### **USE IN FOOD HANDLING ESTABLISHMENTS**

Applications are permitted in food/feed areas of food/feed handling establishments as a contact spray, space spray or treatment of cracks and voids including those operating under the Federal meat, poultry, shell egg grading and egg products inspection programs.

Food handling establishments are places other than private residences in which food is held, processed, prepared or served.

FOOD AREAS: areas for receiving, serving, storing (dry, cold, frozen, raw), packing (canning, bottling, wrapping, boxing), preparing (cleaning, slicing, cooking, grinding) edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups, extraction and pelleting)

NON-FOOD AREAS: garbage containment, lavatories, floor drains, entries and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, closets and storage areas.

Apply according to specific directions for pests to be treated under the Indoor Use section below. Prior to space spray applications, remove or cover exposed food and drinking water in the treatment areas. Remove or cover dishes, utensils, food processing equipment, and food preparation surfaces, in the treatment areas, or wash them before use.

# PREMISE SPRAYS (Indoor and Outdoor):

# Where to Use:

INDOOR: kitchens, bathrooms, basements, garages and laundry rooms as a contact insect killer. Remove pets and birds and cover fish aquariums before application. Apply to insects in: openings leading to voids and hollow spaces in floors, walls, ceilings, equipment legs and bases, around plumbing pipes, doors and windows, and behind and under appliances and cabinets where insects are typically known to be present.

OUTDOOR: Use as an outdoor perimeter spray. Apply to insects outdoors at pest entry sites: along windows and doors, sewer areas, adjacent trees that harbor insects, utility entry points, along walls, garbage holding areas, and other locations that serve as harborage for insects. Do not spray directly onto evergreens, bedding plants, perennials and non-dormant deciduous trees and shrubs at rates higher than 0.1% concentration.

For use in homes and residential areas, institutional, warehousing and commercial establishments: warehouses, restaurants, food processing plants (meat or vegetable processing plants or canneries), supermarkets (non-public areas), hospitals, laboratories, computer facilities, sewers, animal housing facilities (poultry houses, cattle, sheep, swine, goat and dairy facilities, horse stables, dog kennels). Miscellaneous areas: garbage rooms, lavatories, entries, and vestibules, offices, locker rooms, machine rooms, boiler rooms, garages, mop closets and storage (after canning or bottling).]

**PEST-KOTE**<sup>®</sup> **is a contact spray and works only through contact action**. Pest pressure determines retreatment need. Spray insects thoroughly.

Refer to "Application rates for premise sprays" table for the appropriate application rate.



#### Crawling and Flying Insects:

Direct spray applications will control insects:

Ants\*, Blister Beetles, Brown Marmorated Stink Bugs, Caterpillars, Crickets, Earwigs, Firebrats, Fireworms, Flea Beetles, Grasshoppers, House Flies\*\*, Leaftiers, Lygus Mealy Bugs, Millipedes, Psyllids, Silverfish, Sowbugs, Stink Bugs, Spiders\*, Webworms, Crane Flies, Fungus Gnats, Fruit Flies, Gnats, Japanese Beetle, Katydids, Leafhopper, Leafrollers, Loopers, Mushroom Flies, Skippers, Small Flying Moths, Spotted Lanternfly, Stink Bugs, Vinegar Flies, Whiteflies. Repeat application as necessary.

\*Does not include public health pests such as fire, harvester, carpenter and pharaoh ants, or black widow, brown recluse or hobo spiders. \*\*Includes deltamethrin-resistant house flies

# **PEST-KOTE®** Application rates for premise sprays

Indoor/Premise Treated Areas (square feet) Mix PEST-KOTE® as directed, Apply at a rate of 1 gallon per 1000 sq. ft. In the case of severe infestations apply at a rate of 2 gallons per 1000 sq. ft. Use sufficient volume to ensure coverage

Use	Concentration (%)		Concentration (fl. oz. per ONE gallon)		
	Low	High	Low	High	
Ants *	1%	4%	1 ¼ fl. oz	5 fl. oz.	
Spiders *	2%	4%	2 ½ fl. oz.	5 fl. oz.	
Stored Product Pests	1%	4%	1 ¼ fl. oz	5 fl. oz.	
Other Crawling and Flying Insects	1%	4%	1 ¼ fl. oz	5 fl. oz.	
When tank-mixing with other insecticides	0.1%	0.4%	1/8 fl. oz.	1/2 fl. oz.	

<sup>\*</sup>Does not include public health pests such as fire, harvester, carpenter and pharaoh ants, or black widow, brown recluse or hobo spiders. \*\*Includes deltamethrin-resistant house flies

**Outdoor/Premise Treated Areas (square feet)** Mix PEST-KOTE® as directed, spray volumes will treat 1000 sq. ft. Use sufficient volumes to ensure coverage.

Use	Application Rate	PEST-KOTE®: per 1000 sq. ft.	Minimum Spray Volume (gallons)	Use Directions
Duamia	Low	1 fl. oz.	1	Dilute in at least 1 gallon of water, or up
Premise	High	2 fl. oz.	1	to 2 gallons of water for severe infestations, per 1000 sq. ft.



# SURFACE SPRAY IN FOOD/FEED PROCESSING, PRODUCTION, AND STORAGE SITES

PEST-KOTE® is a contact spray and works only through contact action.

Contact Spray - for Use with Sprayers that Give Large, Wetting Spray Particles to Kill Accessible Stages of Indoor Pests and Granary Insects: Ants\*, Brown Marmorated Stink Bug, Drugstore Beetles, Cockroaches (including German Cockroaches, American Cockroaches, Oriental Cockroaches, and Turkestan Cockroaches), Earwigs, Beetles, Boxelder Bugs, Clover Mites, Cadelles, Confused Flour Beetles, Fungus Gnats, Grain Mites, Granary Weevils, House Flies\*\*, Meal Moth Larvae and Adults, Phorid Flies, Red Flour Beetles, Rice Weevils, Sciarid Flies, Spotted Lanternfly, Saw-toothed Grain Beetles, Spiders\*, Stink Bugs and other listed insects.

\*Does not include public health pests such as fire, harvester, carpenter and pharaoh ants, or black widow, brown recluse or hobo spiders. \*\*Includes deltamethrin-resistant house flies

Dilute using 1 part of PEST-KOTE® to 100 parts water (1 ¼ fl. oz. per gallon) and apply at a rate of 1 ¼ gallons per 1000 square feet. Cover or remove exposed food and close room. Spray outside walls of grain bins, flooring, about base of milling machinery, walls and baseboards, areas behind cabinets and around pipes, and other insect harborages apply as a coarse wetting spray using approximately 1 ¼ gallons of spray mixture per 1000 square feet of surface. In case of severe infestation, spray at the rate of 2 ½ gallons per 1000 square feet. To ensure maximum control of listed insects, spray insects thoroughly. Repeat as necessary.

**Stored Food:** (Stored in multi-wall bags or cloth bags) in flour mills, grain elevators, granaries, storage rooms, and warehouses for control of Angoumois Grain Moths, Brown Marmorated Stink Bug, Cadelles, Cheese Mites, Cheese Weevils, Cigarette Beetles, Confused Flour Beetles, Dark Mealworms, Grain Mites, Granary Weevils, Indian Meal Moths, Mediterranean Flour Moths, Red Flour Beetles, Rice Weevils, Saw-toothed Grain Beetles, Spotted Lanternfly, Stink Bugs and Yellow Mealworms: Remove and destroy infested products. Dilute concentrate with water at the rate of 1 part of PEST-KOTE® to 100 parts water (1 ¼ fl. oz. per gallon) and mix well. Apply this product as a coarse wetting spray using approximately 2.5 gallons per 2000 square feet. In case of severe infestation, spray at the rate of 5 gallons per 2000 square feet. Disperse this product first by directing spray into corners, under pallets and around stacks of packaged foods, contacting as many insects as possible.

**Zoos:** As a direct spray, dilute for use in conventional sprayers equipment to kill flying and crawling insects and small flying moths: Dilute concentrate with water at the rate of 1 part of PEST-KOTE® to 100 parts water (1 ¼ fl. oz. per gallon) and mix well. Apply this product as a coarse wetting spray using approximately 1 ½ gallons per 1000 square feet. In case of severe infestation, spray at the rate of 2 gallons per 1000 square feet. Apply to premise (indoors and outdoors) when animals are not present.

Federally Inspected Meat and Poultry Plants: Dilute one part concentrate with 100 parts water (1 ½ fl. oz. per gallon) and spray at the rate of 1 ½ gallon per 1000 square feet. In case of severe infestation, spray at the rate of 2 ½ gallons per 1000 square feet. Apply the spray into all cracks and crevices in woodwork, walls, floors, underneath sinks, behind pipes and in all places where these insects shelter.



Contact as many insects as possible. Repeat as necessary for control of exposed or accessible stages of Ants\*, Darkling Beetles, Earwigs, Fruit Flies, Gnats, Silverfish, Small Flying Moths, Spiders\*.

\*Does not include public health pests such as fire, harvester, carpenter and pharaoh ants, or black widow, brown recluse or hobo spiders.

Before spraying, exposed food products and packaging materials must be covered or removed. After spraying, equipment and utensils must be washed with an effective cleaning compound and rinsed with potable water prior to use. Use as a space spray only when plant is not in operation.

Use as a Surface Spray in Restaurants, Food Processing Plants, Industrial Installations and Warehouses: To kill accessible, exposed stages of insects, Ants\*, Cadelles, Cigarette Beetles, Confused Flour Beetles, Dark Mealworms, Dried fruit Beetles, Drugstore Beetles, Grain Mites, Red Flour Beetles, Rice Weevils, Sawtoothed Grain Beetles, Spider Beetles, Yellow Mealworms.

\*Does not include public health pests such as fire, harvester, carpenter and pharaoh ants.

Dilute one part concentrate with 100 parts water (1  $\frac{1}{4}$  fl. oz. per gallon) and spray at the rate of 1  $\frac{1}{4}$  gallons per 1000 square feet. In case of severe infestation, and spray at the rate of 2  $\frac{1}{4}$  gallons per 1000 square feet.

Pay special attention to force the spray into all cracks and crevices.

#### **BED BUGS**

PEST-KOTE® is a contact spray and works only through contact action.

**PEST-KOTE®** kills with spray application directly onto bedbugs. Thoroughly inspect possible bed bug infestation sites and note areas of potential harborage or known infestation sites. Before application, remove or pick up obstacles, such as clothing, that prevent careful inspection or treatment. Infested bedding (pillows, sheets, and blankets), clothing, or other items should be removed and sanitized.

To kill bed bugs in beds:

- Deconstruct the bed and remove any parts of the bed frame that are wall mounted.
- Apply PEST-KOTE® directly to bed bugs present in the seams, folds, tufts, and edges of mattresses. When applying to bed bugs on mattresses, limit application to seams, folds, tufts, and edges.
- Apply PEST-KOTE<sup>®</sup> directly to bed bugs present in any hollow joints or channels, such as square or round tubing, or into cracks and crevices inside the bed frame, headboards, and footboards.

To kill bed bugs in other sites:

 Apply PEST-KOTE<sup>®</sup> directly to bed bugs found in cracks and crevices that accompany light switches, wall plates, faceplates, outlet covers, mounting boxes and housings, table and wall mounted lamps, wall crevices, drapery rods, curtains, blinds or mounting hardware, and other cracks and crevices.



- Apply PEST-KOTE<sup>®</sup> directly to bed bugs found inside furniture and associated accessories, including inside empty drawers, empty shelving in clothes closets, night stands, carpet edges, low and high wall moldings including floor molding, window casings, window ledges and window sills, door jambs and hinges, wall voids, behind wall fixtures, hangings, and mirrors.
- To kill bed bugs in carpets, pull carpeting from tack strip and apply PEST-KOTE® directly to bed bugs under the baseboard, sill plate, and carpet tack strips.

**Indoor/Premise Treated Areas – Bed Bugs (square feet)** Mix PEST-KOTE<sup>®</sup> as directed, Apply at a rate of 0.4 fl. oz. per sq. ft.

Use	Concentration (%)		Concentration (fl. oz. per ONE gallon)	
	Low	High	Low	High
Bed Bugs	3%	4%	3 ¾ fl. oz	5 fl. oz.

#### **PATENT PENDING**

Distributed by: 3D BioSciences, LLC. 2101 Mystic Ridge Rd Knoxville, TN 37922

FPO

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#### STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in original container. Keep away from open flame, sparks, heated surfaces, and avoid excessive heat (>130°F). Store in a cool, dry place inaccessible to children and pets.

**CONTAINER HANDLING: DO NOT** puncture or incinerate! **Empty** container by using the product according to the label directions. Non-refillable container. **When empty:** 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 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. Then offer container for recycling, if available, or place in trash if allowed by state and local regulations.

#### PESTICIDE DISPOSAL

**If partly filled:** Call your local solid waste agency for disposal instructions.



#### WARRANTY

Read the entire Directions for Use and Warranty before using this product. By using this product, user or buyer accepts the following warranty. The directions for use of this product are believed to adequate and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Unintended consequences may result because of unknown factors. All such risks shall be assumed by the user or buyer. The seller is committed to providing high quality products. To the extent consistent with applicable law, the seller makes no warranties, express or implied, of merchantability or of fitness for a particular purpose or otherwise, that extend beyond statements on this label. To the extent consistent with applicable law, the manufacturer or the seller shall not be liable for indirect, special, incidental or consequential damages. To the extent consistent with applicable law, the exclusive remedy of the user or buyer shall not exceed the purchase price paid.