



# E-PRO

## Adulticide Spray

**CONTROLS:** Black Flies, Eye Gnats, Deer Flies, Face Flies, Fleas, Horn Flies, Horse Flies, House Flies, Stable Flies, Lice, Mange Mites, Northern Foul Mites, Scabies Mites, Sheep Keds, Ticks

**FOR USE IN:** Barns, Dairies, Feedlots, Poultry Houses, Stables, Swine and Livestock Premises

**FOR USE ON:** Beef Cattle and Sheep, Lactating and Non-Lactating Dairy Cattle and Goats, Poultry, Swine and Horses

**DO NOT USE ON CATS OR KITTENS**

# SPECIMEN LABEL

<b>ACTIVE INGREDIENTS:</b>	% by wt.
Permethrin* .....	36.8%
<b>OTHER INGREDIENTS**:</b> .....	63.2%
<b>TOTAL:</b> .....	100.0%

\*Cis/trans ratio: Max. 42% (±) cis and min. 58% (±) trans  
\*\*Contains petroleum distillates.  
This product contains 3.2 pounds permethrin per gallon.

**KEEP OUT OF REACH OF CHILDREN  
CAUTION**

See Additional Precautionary Statements and Directions for Use

EPA Reg.No. 89459-66  
EPA Est. No. 2724-TX-1

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed, inhaled, or absorbed through the skin. Causes moderate eye irritation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash before reuse.

	<b>DO NOT USE ON CATS OR KITTENS. May be toxic or potentially fatal if applied to or ingested by cats.</b> Accidental application to cats and/or grooming a recently treated dog may result in tremors and/or uncoordinated muscle movements. If this occurs, immediate veterinary care should be provided.
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#### FIRST AID

<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give <b>any</b> liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
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(continued)

<b>If on skin or clothing:</b>	<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>
<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<b>HOT LINE NUMBER:</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For additional information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), you may call 1-800-347-8272, 24 hours per day, 7 days per week.	
<b>NOTE TO PHYSICIAN:</b> Contains petroleum distillate – vomiting may cause aspiration pneumonia.	

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

All pesticide handlers (mixers, loaders, and applicators) must wear long-sleeved shirt and long pants, socks, shoes, and chemical-resistant gloves made of Barrier Laminate or Viton. After the product is diluted in accordance with label directions for use and/or when mixing and loading using a closed spray tank transfer system, or an in-line injector system, shirt, pants, socks, shoes and waterproof gloves are sufficient. In addition, all pesticide handlers must wear a respiratory protection device<sup>†</sup> when working in a non-ventilated space and all pesticide handlers must wear protective eyewear<sup>††</sup> when working in a non-ventilated space.

<sup>†</sup>Use one of the following:

A NIOSH approved respirator with an organic-vapor (OV) cartridge with a combination R or P filter, P filter with NIOSH approval number prefix TC-84A; a NIOSH approved gas mask with a canister, with NIOSH approval number prefix TC-14G; or a NIOSH approved powered air-purifying respirator with organic vapor (OV) cartridge and combination HE filter, with NIOSH approval number prefix TC-23C.

<sup>††</sup>Protective eyewear is goggles, a face shield, or safety glasses with front, brow, and temple protection.

## USER SAFETY REQUIREMENTS

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



## USER SAFETY RECOMMENDATIONS

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

## ENVIRONMENTAL HAZARDS

This product is highly toxic to bees exposed to direct treatment or residues on crops or weeds. Do not apply this product or allow it to drift to crops or weeds on which bees are foraging. Additional information may be obtained from your Cooperative Extension Service.



This product is extremely toxic to aquatic organisms, including fish and aquatic invertebrates. Do not apply directly to water, or to areas where  surface water is present or to intertidal areas below the mean high  water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters. Do not apply when weather conditions favor drift from treated areas.

## PHYSICAL OR CHEMICAL HAZARDS

**COMBUSTIBLE:** Do not use or store near heat or open flame.

## DIRECTIONS FOR USE

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

## NON-AGRICULTURAL USE REQUIREMENTS

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

Do not allow people or pets on treated surfaces until the spray has dried.

Do not touch treated surface until dry.

## USE INFORMATION

**Note:** When applying to or around vinyl and aluminum siding, treat a small test area in a non-obtrusive area and allow to dry. Some types of vinyl and aluminum siding, particularly if aged or weathered or during periods of high temperature or high humidity, may show some staining after application of an emulsifiable concentrate product.

Staining may also occur on certain surfaces such as brick, cinder block, stucco and wood. Immediately remove spray deposits on painted or stained surfaces or finishes by washing with soap and water to prevent discoloration. Do not apply to surface where visible spray residues are objectionable.

### USE RESTRICTIONS:

- Use only in well ventilated areas.
- Do not breathe vapors or spray mist.
- Do not touch treated surfaces until dry.
- Do not apply to sources of electricity.
- Except when applying to livestock, do not enter or allow others to enter until spray has dried.
- Do not allow people or pets on treated surfaces until the spray has dried.
- Do not use concentrated or emulsion fogging equipment.
- During indoor surface applications, do not allow dripping or runoff to occur.
- Do not treat areas where food is present.
- Thoroughly wash dishes and food handling utensils with soap and water if they become contaminated by application of this product.
- Do not allow spray to contact food, feedstuffs, food contacting surfaces, food utensils or water supplies.
- During any application to overhead areas of structure, cover surfaces below with plastic sheeting or similar material (except where exempt).
- When used in dairy barns or other dairy facilities, close milk bulk tanks to prevent contamination from spray and from dead or falling insects. Remove or cover milking utensils before application. Wash teats of animals before milking them.
- All outdoor applications must be limited to crack-and-crevice treatments only, except for the following permitted uses: (1) treatments to soil or vegetation around structures; (2) applications to lawns, turf, and other vegetation (as prescribed on this label); (3) applications to building foundations, up to a height of 3 feet; (4) applications to undersides of eaves, soffits, doors, or windows permanently protected from rainfall by covering, overhang, or awnings; (5) applications around potential pest entry points into buildings, when limited to a surface band not to exceed one inch in width; and (6) applications made through the use of a coarse, low-pressure spray to only those portions of surfaces that are directly above bare soil, lawn, turf, mulch, or other vegetation, as listed on this label, and not over an impervious surface, drainage, or other conditions that could result in runoff into storm drains, drainage ditches, gutters, or surface waters, in order to control occasional invaders or aggregating pests.
- Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches, and structural surfaces (such as windows, doors, and eaves) are limited to crack-and-crevice applications, only.
- Do not use this product in indoor or outdoor residential misting systems.

- Do not water the treated area to the point of runoff.
- Do not apply this product when it is raining.
- Except when applying to livestock, do not apply this product in a way that will contact workers or other persons, either directly or through drift.
- Except when applying to livestock, only protected handlers may be in the area during application.
- Except when applying to sewers or drains as instructed on this label, do not apply directly to sewers or drains, or to any area like a gutter where drainage to sewers, storm drains, water bodies, or aquatic habitat can occur.

**Spray Drift Precautions:**

All ground application equipment must be properly maintained and calibrated using appropriate carriers. Do not make ground applications during temperature inversions. Make ground applications when the wind velocity favors on target product dispersion (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Do not apply by ground equipment within 25 feet of lakes, marshes or natural ponds, reservoirs, rivers, permanent streams, estuaries, and commercial fish farm ponds.

**RESIDENTIAL PEST CONTROL**

Do not tank-mix this product with dichlorvos (DDVP) containing products. This product can be tank-mixed with Insect Growth Regulators (IGR's) or pyrethrin containing products. When mixing **Starbar® E-Pro Adulicide Spray (E-Pro)** with other products, observe all precautions and limitations of the labels of each product. To prepare the emulsion, dilute **E-Pro** with water only. To prepare a 0.5% emulsion, mix 1.6 fl oz (50 ml) in 1 gallon of water.

**E-Pro** is an emulsifiable concentrate to be diluted with water and used to control pests around structures. The pests controlled are listed in the accompanying tables.

**E-Pro** may be used as a crack and crevice injection, as a paint-on treatment, as a broadcast or spot application to perimeter soil. Consult the applicable tables in this label for specific use instructions.

**Broadcast Treatment for the Control of Nuisance Pests Outside of Structure**

Apply a 0.5% emulsion with a fan spray using a maximum of 25 psi. Do not allow runoff to occur. To control bees, hornets, wasps, and yellow-jackets, apply this product in late evening when insects are at rest. Aim spray at nest openings in ground, bushes and in the cracks and crevices that may harbor nests, saturating nest openings and contacting as many insects as possible.

**Pest Control on Outside Surfaces and Around Buildings**

Apply **E-Pro** using a 0.5% emulsion as a residual spray to outside surfaces of buildings including, but not limited to, foundations, exterior siding, window frames, refuse dumps, storage sheds, fence lines, barns, and other residential structures, commercial buildings, soil, trunks of woody ornamentals and other areas where pests congregate or have been seen.

**Perimeter Treatment:** Apply to band of soil and vegetation 6 to 10 feet wide around and adjacent to the structure. Also, treat the foundation of the structure to a height of 2 to 3 feet. Use a spray volume of 2 to 10 gallons of emulsion per 1,000 square feet. Higher volumes of water may be needed if mulch or leaf litter is present or foliage is dense.

PESTS	SPECIFIC APPLICATION INSTRUCTIONS
Ants <sup>4</sup> Ant Mounds <sup>1,4</sup> Armyworms <sup>4</sup> Fire Ants <sup>4</sup> Bees Wasps Carpenter Bees Bark Beetles <sup>3</sup> Borers <sup>4</sup> Boxelder Bugs <sup>2,4</sup> Centipedes Cockroaches <sup>4</sup> Asian Cockroaches Crickets <sup>4</sup> Mole Crickets <sup>4</sup> Earwigs Elm Leaf Beetles <sup>2</sup> Firebrats Fleas <sup>4</sup> Ground Beetles <sup>4</sup> Gypsy Moths (adults and caterpillars) <sup>2</sup> Millipedes Scorpions Sod Webworms <sup>4</sup> Silverfish Sowbugs Spiders <sup>4</sup> Ticks <sup>4,5</sup> Flies Carpenter Ants Chinch bugs <sup>4</sup> Pillbugs	Apply as a pinstream, as a fine/coarse spray, as a spot treatment or with a paint brush. Treat where pests are found or entry points of the structure such as window and doorframes and along the foundation. Do not apply to structures with high-pressure sprayers such as air blast sprayers.  <sup>1</sup> <b>Mound Drench Method:</b> Apply 1-2 gallons of emulsion to each mound area by sprinkling the mound until it is wet and treat a 4 foot diameter circle around the mounds. Apply 2 gallons of emulsion for mounds larger than 12" in diameter. For best results, apply in cool weather, such as in the early morning or late evening hours, but not in the heat of the day.  <sup>2</sup> <b>Boxelder Bugs, Elm Leaf Beetles, Gypsy Moth Caterpillars:</b> Spray tree trunks, building siding or wherever pests congregate thoroughly, but do not allow runoff to occur.  <sup>3</sup> <b>Borers and Bark Beetles:</b> To prevent infestation of trees and woody ornamentals, spray the bark thoroughly, but do not allow runoff to occur.  <sup>4</sup> Apply <b>E-Pro</b> at the rate of 0.4 to 0.8 fl oz per 1,000 square feet in a volume of water sufficient for uniform coverage such as 4 to 25 gallons. Use 0.4 fl oz per 1,000 square feet to knock down existing pests and 0.8 fl oz per 1,000 square feet where faster knockdown or greater residual control is desired. Application in combination with compatible surfactants may enhance penetration. Arid climates generally require higher volumes.  <sup>5</sup> Residual treatment for control of Deer Tick, Western Black-legged Tick and other Ticks (important vectors for Lyme Disease, Rocky Mountain Spotted Fever).

**APPLICATIONS TO AGRICULTURAL STRUCTURES**

**For Agricultural use only**

**Application Instructions**

**E-Pro** can be used for residual pest control in and on buildings and structures used for agricultural purposes.

**E-Pro** is an emulsifiable concentrate to be diluted with water and applied as an emulsion to control pests in and around agricultural structures. Pests controlled are listed in the accompanying tables.

**Agricultural Structures**

Spray directly or apply by spot treatment to walls and ceiling as a residual surface treatment only. Do not treat manure or litter. Avoid contamination of feed and water.

FOR APPLICATION IN	TARGET INSECTS	METHOD OF APPLICATION	DILUTE	APPLICATION RATE
Dairies Barns Feedlots Stables	Lesser Mealworms Darkling Beetles	Sprayer	4 fl oz to 12.5 gallons of water	1 gallon per 750 square feet of surface
Poultry Houses Swine and Livestock Houses	House Flies Stable Flies and other Manure Breeding Flies	Fog or Mist	1.5 to 2.0 fl oz per 1 gallon of water	2 fl oz per 1,000 cubic feet of surface
	Also aids in the reduction of Cockroaches, Mosquitoes and Spiders			

## AS A LIVESTOCK SPRAY

ANIMALS	INSECTS	DILUTE & USE	APPLICATION RATE
Lactating and Non-Lactating Dairy Cattle and Goats, Beef Cattle and Sheep	Horn Flies Only	4 fl oz to 50 gallons water (treats 200 head) 0.025% active ingredient (ai) High-pressure spray	1 quart of coarse spray per animal.
	Horn Flies Face Flies Stable Flies House Flies Horse Flies Deer Flies Black Flies Eye Gnats Mange Mites Scabies Mites Ticks Lice Sheep Keds	4 fl oz to 25 gallons water (treats 50-100 head) 0.05% ai High-pressure spray	1-2 quarts of coarse spray per animal over whole body surface.  For Mange, Scabies, Ticks and Lice, thoroughly wet animal. Repeat application in 10-14 days for Mites and Lice.
	Horn Flies Face Flies Stable Flies Ear Ticks Lice	4 fl oz to 2½ gallons water (treats 64-80 head) 0.5% ai Low-pressure spray (hand pump sprayer)	For Fly and Lice control, thoroughly spray mid-line from face to tailhead, but do not allow runoff to occur. For Ear Tick control, spray directly into each ear (½ fl oz each).
	Horn Flies Face Flies Stable Flies	4 fl oz to 10 gallons diesel oil or suitable mineral oil 0.125% ai Back rubber, self oiler	Keep rubbing device charged. Results improve by daily forced use.
Poultry	Northern Fowl Mites Lice	1-4 fl oz to 3¼ gallons water (treats 375 head) 0.08-0.33% ai High-pressure spray	1 gallon of coarse spray per 100 birds paying particular attention to vent area.
Swine (Allow 5 days between last treatment and slaughter)	Lice and Mange	4 fl oz to 25 gallons water (treats 50-100 head) 0.05% ai Sprayer or dip	Thoroughly wet or dip animals, including ears. For Mange, spray pen floors, sides and bedding. Repeat at 14 days.
Horses	Horn Flies Face Flies Stable Flies House Flies Horse Flies Black Flies Eye Gnats Mange Mites Scabies Mites Ticks Lice Fleas	¼ fl oz to 1 pint water 0.6257% ai Low-pressure spray	1-2 fl oz spray per animal. Spot treat back, face, legs, tail and ears.
		¼ fl oz to 1¼ gallons water 0.0626% ai Dip wash	Thoroughly wet animal skin with sponge or rag. Let drip-dry.

## STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original containers only. Store in a cool, dry place and avoid excess heat. Do not store below 40°F. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. **PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Offer for recycling if available, or reconditioning if appropriate or puncture and dispose of container in a sanitary landfill or by other procedures approved by state and local authorities.

### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**NOTE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Central Garden & Pet Company or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Central Garden & Pet Company and Seller harmless for any claims relating to such factors.

Central Garden & Pet Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or Central Garden & Pet Company, and Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, CENTRAL GARDEN & PET COMPANY MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

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