

CARDINAL
CHEMICAL
COMPANY



Manufacturing Facilities
1135EB Sunrise Gold Circle
Rancho Conejo, CA 91302

EPA EST. 5440-CA-1

PROTECTING
THE FOODS
THAT FEED
THE NATION

CARDINAL FOOD PLANT 5-1 INSECTICIDE

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND (DOMESTIC ANIMALS) CAUTION

Harmful if swallowed. Avoid breathing vapor. Avoid contact with skin, eyes or clothing. Wear protective clothing. Wash exposed skin with soap and water after handling and before eating. Wash all contaminated clothing with soap and water separately from other clothing before reuse. Do not apply directly to food in commercial food handling facilities, cover or remove any food and food processing equipment during application. Do not apply while food processing is under way. After space spraying in meat plants, wash all equipment, facilities, benches, shelving, etc. thoroughly with an acceptable detergent solution and then rinse with potable water to remove all traces of contamination where exposed food will be handled. In the home, all food processing surfaces and utensils should be covered during treatment or thoroughly washed before use. Remove pets and birds, and cover fish aquariums before spraying.

FIRST AID

If in eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.
If on skin: Wash skin with plenty of soap and water. Get medical attention if irritation persists.

PHYSICAL OR CHEMICAL HAZARDS

Extinguish open flame before space spraying. This formulation is combustible. DO NOT USE POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME.

DIRECTIONS FOR USE

* See section of Federal Law to use this product. For numerous insects listed with its labeling. SEE SIDE PANEL FOR ADDITIONAL INSTRUCTIONS.

STORAGE AND DISPOSAL

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

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

CONTAINER DISPOSAL: Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedure approved by state and local authorities.

DIRECTIONS FOR USE

Cardinal Food Plant 5-1 Insecticide should be used as directed for control of the following insects:

Angoumois Grain Moth	Cheese Mites
Ants	Cigarette Beetles
Boxelder Bugs	Clover Mites
Crickets	Cockroaches (German)
Cheese Mites	Confused Flour Beetles

PYRENONE[®]

ACTIVE INGREDIENTS:

Pyrethrins	1.00%
*Piperonyl Butoxide, Technical	5.00%
**INERT INGREDIENTS:	97.00%
TOTAL:	100.00%

*Equivalent to 4.00% (butylcarbitol)(6-propylpiperonyl) ether and 1.00% related compounds
**Contains Petroleum Distillate

KEEP OUT OF REACH OF CHILDREN
CAUTION
SEE SIDE PANEL FOR ADDITIONAL
PRECAUTIONARY STATEMENTS

EPA Reg. No. 5440-113

WARRANTY STATEMENT: Our recommendations for use of this product are based upon tests believed to be reliable. The use of this product is beyond the control of the manufacturer. No guarantee, expressed or implied, is made as to the effect of such or the results to be obtained if not used in accordance with directions of established safe practice. The buyer must assume all responsibility including injury or damage resulting from its misuse as such or in combination with other materials.

Pyrenone[®]

Registered trademark of Farnam American Corporation

Crickets
Dark Mealworms
Deer Flies
Dried Fruit Beetles
Drug Store Beetles
Earwigs
Fruit Flies
Fungus Gnats
Gnats
Grain Mites
Granary Weevils
Horn Flies
Hornets
Horse Flies
House Flies
Indian Meal Moths

Lice
Mediterranean Flour Moths
Mosquitoes
Mushroom Flies
Red Flour Beetles
Rice Weevils
Sawtoothed Grain Beetles
Silverfish
Spiders
Spider Beetles
Stable Flies
Tobacco Moth
Wasps
Yellow Mealworms

FOR TRAINED PERSONNEL ONLY

To be applied only by or under the supervision of pest Control Operators, members of Mosquito Abatement Districts or Public Health Organizations and other Trained Personnel responsible for insect Control Programs. For indoor or outdoor application as a space area or contact spray. Dependent upon pests to be controlled and the area to be treated, may be applied through Mechanical Aerosol Generators (ULV) as well as conventional fogging or spraying equipment.

INDOOR USE AREAS

Bakeries	Office Buildings
Beverage Plants	Poultry Houses
Canneries	Railroad Cars
Cattle Barns	Homes
Dried Food Products	Schools
in Storage or Processing	Shed Food in Mu-
Flour Mills	Washed Paper or Cloth Bags
Food Processing Plants	Supermarkets
Grain Elevators	Swine Houses
Granaries	Truck Trailers
Horse Barns	Warehouses
Hospitals	Ships Holds
Hotels	Zoos
Industrial Installations	Restaurants
Meat Packing Plants	Motels

OUTDOOR USE AREAS

Corrals	Playgrounds
Drive In Restaurants	Recreational Areas
Drive In Theaters	Swine Yards
Feedlots	Urban Areas
Golf Courses	Zoos
Parks	

INDOOR USE (UNDILUTED)

The use of this product in food processing or food handling establishments (bakeries, beverage plants, canneries, food processing plants, hospitals, hotels, industrial installations, meat packing plants, restaurants, schools, supermarkets and warehouses) should be confined to time periods when the plants or facilities are not in operation. Foods should be removed or covered during treatment. All food processing surfaces should be covered during treatment or thoroughly cleaned before reusing.

SPACE AND CONTACT SPRAY APPLICATION

To Control accessible adult stages of

Fruit Flies	Cheese Mites
Mosquitoes	Cheese Skippers
Small Flying Moths	Boxelder Bugs
Wasps	Ants
Hornets	Earwigs
Clover Mites	Cockroaches (German)
Silverfish	Crickets

and the following common stored product pests:

Granary Weevils	Indian Meal Moths
Rice Weevils	Tobacco Moths
Confused Flour Beetles	Yellow Mealworms
Sawtoothed Grain Beetles	Dark Mealworms
Spider Beetles	Grain Mites
Cigarette Beetles	Red Flour Beetles
Angoumois Grain Moths	Cadeilles
Mediterranean Flour Moths	

Close doors and windows and shut off ventilating systems. Use a mechanical aerosol generator or a fogger adjusted to deliver aerosol droplets (30 microns or less). Direct the spray first into all cracks and crevices, behind all equipment, cupboards, obstructions or dark harborage areas to provide maximum penetration and impingement on the insects. Then treat as a space spray, directing the spray towards the ceiling and upper corners of the area and behind any obstructions, apply at a rate of 1 ounce per 1000 cubic feet of space. Keep area closed for at least one hour. Vacate treated area and ventilate before reoccupying. Repeat treatment as necessary.

TREATMENT OF STORED FOOD AREAS

Foods in multi-walled bags or in cloth bags stored in warehouses, storage rooms, flour mills, grain elevators and granaries. To control accessible adult stages of:

Angoumois Grain Moth	Cheese Mites
Cadeilles	Cheese Skippers
Confused Flour Beetles	Cigarette Beetles
Indian Meal Moths	Grain Mites
Mediterranean Flour Moths	Granary Weevils
Rice Weevils	Dark Mealworms
Sawtoothed Grain Beetles	German Cockroaches
Yellow Mealworms	Red Flour Beetles

Infested stored products should be destroyed, fumigated or treated by other effective methods using an approved product intended for this purpose. As noted above, disperse Cardinal Food Plant 5-1 Insecticide first by directing spray into cracks and crevices, corners, pallets and around stacks of packaged goods, hitting as many insects as possible and then apply as a space spray at dosage of 5 ounces per 1000 cubic feet of room space. Repeat application as necessary for insect control. Leave the treated areas closed for one hour. Do not remain in treated area and ventilate before reentry.

INDOOR USE (DILUTED)

SPACE SPRAY APPLICATION: For use in mechanical fogging or spraying equipment. To control accessible

stages of	Gnats
Flies	Small Flying Moths
Fruit Flies	
Mosquitoes	

Cover or remove exposed food and cover food handling surfaces in edible product areas of food handling establishments. Close room and shut off air conditioning or ventilating equipment. Mix 13 ounces of Cardinal Food Plant 5-1 Insecticide with sufficient oil to equal one gallon of diluted spray. Apply at the rate of 1-2 fluid ounces per 1000 cubic feet filling the room with mist. Keep area closed for at least 15 minutes. Vacate treated area and ventilate before reoccupying. Repeat treatment if reinfestation occurs.

ANIMAL QUARTER USE: (cattle barns, horse barns, poultry houses, swine houses, zoos). As a space spray diluted for use in conventional mechanical fogging or spraying equipment. To control:

Small Flying Moths
Mosquitoes
Gnats

Mix 13 ounces of Cardinal Food Plant 5-1 Insecticide with sufficient oil to equal one gallon of diluted spray. Apply at the rate of 2 ounces per 1000 cubic feet of space above the animals. Direct spray towards the upper portions of the enclosure. Fill the room with mist. Keep area closed for at least 15 minutes. Vacate treated area and ventilate before reoccupying. Repeat treatment if reinfestation occurs.

INDOOR ROOM PROTECTION AND PROTECTION:
To control: Mushroom Flies and Fungus Gnats

Mix 13 ounces of Cardinal Food Plant 5-1 Insecticide with sufficient oil to equal one gallon of diluted spray. Apply in growing houses at 1 ounce per 1000 cubic feet of space. Fogger should be operated 8 to 10 feet away from the beds and directed slightly upwards over them. Circulating fans should be in operation, but for best results, temperatures should be kept below 85 degrees Fahrenheit. Use at a rate of one ounce per 1000 cubic feet of space.

SURFACE SPRAY APPLICATION

To control accessible stages of

Ants	Lice
Boxelder Bugs	Spider Beetles
Clover Mites	German Cockroaches
Drugstore Beetles	Crickets
Earwigs	Silverfish

Mix 13 ounces of Cardinal Food Plant 5-1 Insecticide with sufficient oil to equal one gallon of diluted spray. Apply as a coarse droplet spray using approximately one gallon to 750 square feet of space. Spray walls, floors and other surfaces of bins and storage and handling areas thoroughly, being especially careful to treat cracks, crevices and similar hiding places. Treat unloading, handling and processing areas and inside conveying, processing and handling equipment. Spray thoroughly around the base of heavy machinery and equipment. Spray insects directly when possible.

FOR IN TRANSIT PROTECTION: Clean and spray truck beds, boxcars and ships holds before loading. Thoroughly treat walls and floors and spray each layer of cartons or containers lightly as stacked.

TREATMENT OF STORED GRAIN

To control accessible adult stages of Indian Meal Moth and Angoumois Grain Moth

Apply to the surface of binned grain at a rate of 1 gallon per 1000 square feet. Apply at monthly intervals with the first appearance of moths and continue until early fall. To severe infestations, treat up and down a bin before spraying and make a second application in two weeks.

TREATMENT OF FLYING INSECTS RESTING PLACES

To aid in the control of:

Mosquitoes	Gnats
Wasps	Skippers

Treat walls, ceilings, moldings, screens, door frames, window frames, beams, light cords and similar resting places with the above dilution of Cardinal Food Plant 5-1 Insecticide.

OUTDOOR APPLICATION (UNDILUTED)

To control Mosquitoes, Gnats and Small Flying Moths

For best results, use truck mounted equipment and apply when there is a light breeze of approximately 5 miles per hour. Spray from the windward side so that fog will be carried across the area to be treated. Treat shrubbery and vegetation on where mosquitoes may rest, particularly stagnant pools, marshy areas, shore lines and ponds. However, application of this undiluted product to any body of water is prohibited. Repeat treatment as required.

Disperse the Cardinal Food Plant 5-1 Insecticide at the following rates:

Truck Speed	10
miles per hour	5
ounces per acre	5
feet of space	10

Delivery rates and travel speeds should be adjusted as long as the basic dosage of actual pyrethrins per acre is maintained at 5 ounces per acre for a swath width of 300 feet or more.

FOR TEMPORARY REDUCTION OF PESTS

In grain elevators, restaurants, truck unloading areas, parks, playgrounds, areas, direct the spray into air and lawns where the pest is present. While area is still and a drift should be made prior to use.

In the treatment of animal quarters, an exposed water drain should be treated before application. From the spray, into tall grass, etc. where the insects may be present, and into tall grass, etc. where the insects may be present.

Direct spray into the upper portions of the enclosure. Fill the room with mist. Keep area closed for at least 15 minutes. Vacate treated area and ventilate before reoccupying. Repeat treatment if reinfestation occurs.

FOR USE ON ANIMALS

To control accessible adult stages of:

Mosquitoes	Gnats
Wasps	Skippers

Treat walls, ceilings, moldings, screens, door frames, window frames, beams, light cords and similar resting places with the above dilution of Cardinal Food Plant 5-1 Insecticide.

Apply to the surface of binned grain at a rate of 1 gallon per 1000 square feet. Apply at monthly intervals with the first appearance of moths and continue until early fall. To severe infestations, treat up and down a bin before spraying and make a second application in two weeks.

For best results, use truck mounted equipment and apply when there is a light breeze of approximately 5 miles per hour. Spray from the windward side so that fog will be carried across the area to be treated. Treat shrubbery and vegetation on where mosquitoes may rest, particularly stagnant pools, marshy areas, shore lines and ponds. However, application of this undiluted product to any body of water is prohibited. Repeat treatment as required.