



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

March 9, 2017

Mardel Belotinsky
Soil Chemicals Corporation dba Cardinal Professional Products
P.O. Box 782
Hollister, CA 95024

Subject: Label Amendment – To add an additional container size; make revisions to the respirator language
Product Name: Cardinal Food Plant 5-1 Insecticide
EPA Registration Number: 8536-35
Application Date: November 15, 2016
Decision Number: 523933

Dear Ms. Belotinsky:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Gene Benbow by phone at 703-347-0235 , or via email at Benbow.Gene@epa.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gene Benbow".

Gene Benbow, Acting Product Manager 4
Invertebrate & Vertebrate Branch 1
Registration Division (7505P)
Office of Pesticide Programs



ACCEPTED

03/09/2017

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 8536-35

Cardinal Food Plant 5-1 Insecticide (Alternate Brand Name: Pyre-X)

INTENDED TO BE APPLIED ONLY BY OR UNDER THE SUPERVISION OF PEST CONTROL OPERATORS AND OTHER TRAINED PERSONNEL RESPONSIBLE FOR INSECT CONTROL PROGRAMS

WHEN USED AS A SPACE OR AREA OR CONTACT TREATMENT, CAN ONLY BE APPLIED IN ENCLOSED AREAS

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

ACTIVE INGREDIENTS:

Pyrethrins1.0%
Piperonyl Butoxide*5.0%

OTHER INGREDIENTS:** 94.0%

TOTAL: 100.0%

*(butylcarbityl) (6-propylpiperonyl) ether and related compounds

**Contains petroleum distillates

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lens, 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. You may also contact 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN:

Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Mixers, loaders, applicators, and other handlers must wear the following:
 - Long-sleeved shirt,
 - Long pants,
 - Shoes and socks, and
 - Chemical-resistant gloves (such as Barrier Laminate, Nitrile or Neoprene Rubber, or Viton, selection category E).
- In addition to the above PPE, applicators using hand-held foggers in an enclosed area must wear a half-face, full-face, or hood-style NIOSH-approved respirator with:
 - A NIOSH-approved particulate respirator with any R or P filter with NIOSH approval prefix TC-84A, or
 - A NIOSH-approved gas mask with an organic vapor canister with NIOSH approval prefix TC-14G, or
 - A NIOSH-approved powered air purifying respirator with an organic vapor cartridge and combination HE filter with NIOSH approval prefix TC-23C.

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 materials that have been drenched or 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.
- Remove clothing/PPE 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.

PHYSICAL OR CHEMICAL HAZARDS

Combustible. Extinguish open flame before space spraying. Do not use, pour, spill, or store near heat or open flame.

DIRECTIONS FOR USE

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

CARDINAL FOOD PLANT 5-1 INSECTICIDE/PYRE-X is to be used as directed for control of the following insects: Angoumois Grain Moth, Ants, Boxelder Bugs, Cadelles, Cheese Mites, Cheese Skippers, Cigarette Beetles, Clover Mites, Cockroaches (German), Confused Flour Beetles, 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, Saw Toothed Grain Beetles, Stable Flies, Tobacco Moths, Wasps, Yellow Mealworms.

INDOOR USE AREAS: Bakeries, Beverage Plants, Canneries, Dried Food Products in Storage or Processing, Flour Mills, Food Processing Plants, Grain Elevators, Granaries, Homes, Hospitals, Hotels, Industrial Installations, Meat Packing Plants, Motels, Office Buildings, Railroad Cars, Restaurants, Schools, Ships' Holds, Stored Food in Multi-Walled Paper or Cloth Bags, Supermarkets, Truck Trailers, Warehouses.

USE RESTRICTIONS

GENERAL USE RESTRICTIONS:

- Only protected handlers may be in the area during application.
- 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.
- Not for use in outdoor residential misting systems.
- Do not use in aircraft.

In addition to the above General Use Restrictions, when used as a surface spray:

- Do not allow adults, children, or pets to enter until sprays have dried.

In addition to the above General Use Restrictions, when used for space treatment:

- Do not allow adults, children, or pets to enter until vapors, mists, and aerosols have dispersed, and the treated area has been thoroughly ventilated.
- 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.
- Do not remain in treated area. Exit area immediately and remain outside the treated area until aerosols, vapors, and/or mists have dispersed.

In addition to the above General Use Restrictions, for indoor uses:

- Remove pets and birds, and cover fish aquariums before application.
- Remove or cover exposed food and drinking water before application.
- Remove or cover dishes, utensils, food processing equipment, and food preparation surfaces, or wash them before use.
- In hospitals, patients must be removed from room prior to treatment. Room must be ventilated for two hours after spraying. ***Do not return patients to room until after ventilation.***

In addition to the above General Use Restrictions, when used in food handling or food processing facilities (bakeries, beverage plants, canneries, food processing plants, hospitals, hotels, industrial installations, meat packing plants, restaurants, schools, supermarkets and warehouses):

- Do not make space applications when facility is in operation. Prior to space applications, cover or remove food. ***Do not apply directly to food.***
- Prior to space applications, cover food processing surfaces, or clean after treatment and before use.

INDOOR USE, UNDILUTED

SPACE AND CONTACT SPRAY APPLICATION: To control accessible adult stages of Ants, Boxelder Bugs, Cheese Mites, Cheese Skippers, Clover Mites, Cockroaches (German), Crickets, Earwigs, Fruit Flies, Hornets, Mosquitoes, Silverfish, Small Flying Moths, Wasps, and the following common stored product pests: Angoumois Grain Moths, Cadelles, Cigarette Beetles, Confused Flour Beetles, Dark Mealworms, Grain Mites, Granary Weevils, Indian Meal Moths, Mediterranean Flour Moths, Red Flour Beetles, Rice Weevils, Sawtoothed Grain Beetles, Spider Beetles, Tobacco Moths, Yellow Mealworms.

Close doors and windows and shut off ventilating systems. Cover or remove any food and food processing equipment before application. ***Do not apply while food processing is underway.*** Use a mechanical aerosol generator or a fogger adjusted to deliver aerosol droplets (30 microns or less). Direct the undiluted 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 up to 1 ounce per 1000 cubic feet of space. Keep area closed for at least one hour. Vacate treated area and ventilate before reoccupying. After application, all equipment, benches, shelving, etc. where food will be handled must be washed with an effective cleaning compound and rinsed with potable water. 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, Cadelles, Cheese Mites, Cheese Skippers, Cigarette Beetles, Cockroaches (German), Confused Flour Beetles, Dark Mealworms, Grain Mites, Granary Weevils, Indian Meal Moths, Mediterranean Flour Moths, Red Flour Beetles, Rice Weevils, Sawtoothed Grain Beetles, Yellow Mealworms.

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 the undiluted 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 Flies, Fruit Flies, Gnats, Mosquitoes, Small Flying Moths. Do not apply directly to food. 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 1 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.

SURFACE SPRAY APPLICATION: To control accessible stages of Ants, Boxelder Bugs, Clover Mites, Cockroaches (German), Crickets, Drugstore Beetles, Earwigs, Lice, Silverfish, Spider Beetles: Mix 13 ounces of Cardinal Food Plant 5-1 Insecticide with sufficient oil to equal 1 gallon of diluted spray. Do not apply directly to food. Apply as a coarse droplet spray using approximately 1 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: Using the above dilution, 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: Using the above dilution, to control accessible adult stages of Angoumois Grain Moth and Indian Meal 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. In severe infestations, break up webbing with a rake before spraying and make a second application in two weeks.

TREATMENT OF FLYING INSECTS' RESTING PLACES: To aid in the control of Gnats, Mosquitoes, Skippers, Wasps: 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.

[Alternate/optional text (for PYRE-X) follows.]

APPLICATION WITH CO₂-PRESSURIZED CYLINDERS:

- **PYRE-X** is applied using cylinders pressurized with carbon dioxide (CO₂), which allows the product to be dispensed as a fog.
- **PYRE-X** may be applied at a maximum rate of 1 fluid oz. per 1,000 cubic feet (equivalent to 0.05 lbs. per 1,000 cubic feet). The registrant may custom-fill the cylinder(s) ahead of time, to the exact amount necessary for the space to be treated. For other applications, use Table 1, below, to determine the proper dosage.
- The **PYRE-X** cylinders may also be pressurized by the registrant prior to shipping to the end-user, or the end-user can pressurize the cylinders at the job-site according to the following instructions. Once the cylinders are pressurized, they may remain in storage for up to fourteen days prior to application.

- Pressurizing the **PYRE-X** cylinder:
 1. To pressurize the **PYRE-X** cylinder, place it on a platform scale that will measure at minimum increments of tenths of a pound, with a CO₂ cylinder close by.
 2. Remove protective cylinder bonnets from both cylinders, and check to determine that the valves are firmly in the “OFF” position; then remove safety caps. Using a high pressure hose rated at a minimum of 2,000 psi, connect the two cylinders using CGA-320 carbon dioxide fittings.
 3. Open the CO₂ cylinder valve; then open the **PYRE-X** cylinder valve, and add 8 lbs. of CO₂ to the 20 lb. **PYRE-X** cylinder, or add 25 lbs. of to the 50 lb. **PYRE-X** cylinder. Turn off both valves. Replace the safety cap and bonnet on the CO₂ cylinder and reserve it for future use.
- To apply the product, use a high pressure hose (rated at a minimum of 2,000 psi) to connect the **PYRE-X** cylinder to the application system, or directly attach the application nozzles to the cylinder. Turn on the **PYRE-X** cylinder and dispense the appropriate dosage to the space to be treated, according to Table 1. If the **PYRE-X** cylinder has been custom-filled by the registrant with the exact dose required, empty the entire contents of the cylinder. If applying **PYRE-X** by weight, use a platform scale that reads in hundredths of a pound.

Table 1

Amount of Pyre-X in lbs	Lbs of CO ₂ Added	Total Weight of Pyre-X and CO ₂	Weight of Mixture Required to apply 1 fluid oz/1,000 cubic feet of PYRE-X
Pyre-X in 20 lb. cylinders			
1.61 lbs (1 lb., 9.8 oz.) (0.25 gallons)	8 lbs	9.61 lbs	0.30 lbs/1,000 cubic feet
3.23 lbs (3 lbs., 3.7 oz.) (0.5 gallons)	8 lbs	11.23 lbs	0.17 lbs/1,000 cubic feet
4.84 lbs (4 lbs., 13.4 oz.) (0.75 gallons)	8 lbs	12.84 lbs	0.13 lbs/1,000 cubic feet
6.46 lbs (6 lbs., 7.4 oz.) (1.0 gallons)	8 lbs	14.46 lbs	0.11 lbs/1,000 cubic feet
Pyre-X in 50 lb. cylinders			
16.15 lbs. (16 lbs., 2.4 oz.) (2.5 gallons)	25 lbs.	41.15 lbs.	0.12 lbs./1,000 cubic fee
Custom Filled (Maximum 1.50 gallons)*	8 lbs	Custom Weight	Apply Entire Contents of Cylinder

- When the appropriate amount of **PYRE-X** has been dispensed, close the **PYRE-X** cylinder valve.
- Once the application has been completed, if a fixed nozzle system was used for the application, purge the system with CO₂ for a minimum of 5 minutes. If the nozzles are attached directly to the **PYRE-X** cylinders, purging is not necessary.

- Replace the safety cap and bonnet on the **PYRE-X** and CO₂ cylinders.
- The empty **PYRE-X** cylinder must be returned to **Cardinal Professional Products** per the **STORAGE AND DISPOSAL** directions, below.

[STORAGE AND DISPOSAL for refillable containers follows below.]

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in original container in a cool, dry, locked place, out of reach of children.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. 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--Refillable Container (steel cylinder): Only the registrant is allowed to refill this container, and the container must be refilled with pesticide only. Do not reuse this container for any other purpose. Cylinders are the property of Cardinal Professional Products and must be returned promptly after use, whether empty or partially full. Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use. After use, close valve, screw safety cap tightly onto valve outlet, and replace protection bonnet before shipping back to registrant. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller.

CONTAINER DISPOSAL: Only the registrant can clean or dispose of the container.

Instructions to registrant: To clean the container before final disposal, remove any remaining liquid from the container, using dry air pressure if necessary. Allow container to aerate for at least 5 days. After aeration, wash container using hot water; then offer container to qualified reconditioner or dispose of as directed by State or local regulations.

[STORAGE AND DISPOSAL for non-refillable containers follows below.]

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store product in original container, in a cool, dry, locked place, out of reach of children.

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: Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into the application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. *Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into the application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. [* For containers with capacities equal to or less than 5 gallons, the tipping and turning procedure can be replaced with shaking the container for 10 seconds.]

STATEMENT OF WARRANTY AND LIABILITY

Seller warrants that this product complies with the specifications expressed in this label. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SELLER MAKES NO OTHER WARRANTIES AND DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE INTENDED PURPOSE. To the extent consistent with applicable law, seller's liability for default, breach or failure under this label shall be limited to the amount of the purchase price. To the extent consistent with applicable law, seller shall have no liability for consequential damages.



Produced for:

Cardinal Professional Products

P. O. Box 782 - Hollister, CA 95024-0782

EPA Reg. No. 8536-35 EPA Est. 11220-CA-8; 8536-IL-1; 8536-CA-5

NET CONTENTS: ___ 1 gal.; ___ 2.5 gal.; ___ 5 gal.; ___ 55 gal.; ___ lbs., ___ oz.