JAN 16 1991

Mr. Jan Brill Fairfield American Corporation 809 Harrison Street Frenchtown, NJ 08825

Dear Mr. Brill:

Subject: Acute Toxicity Studies Conducted on the Amended

Formulation

Permanone Multi-Purpose 10% EC EPA Registration Number 4816-688

Your Submission Dated August 29, 1990

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

1. Revise the Precautionary Statements to the following:

Harmful if inhaled. Causes moderate eye injury. Avoid breathing vapor or spray mist and contact with eyes, skin or clothing. Remove contaminated clothing and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling.

- 2. Revise the Statement of Practical Treatment as follows:
- a.) To the If Inhaled, add "Get medical attention." at the end of the statement.
 - b.) Change the If On Skin as follows:

If On Skin: Wash with plenty of soap and water. Get medical attention if irritation persists.

3. You must submit an acceptable dermal sensitization study on the product formulation or submit additional information to upgrade the current study. The other acute toxicity studies submitted are acceptable and have been assigned to the following categories:

Le Moror 1/14/11

STUDY	STUDY CLASSIFICATION	TOXICITY CATEGORY	MRID NUMBER
Acute Oral LD-50	Guideline	IV	416280-01
Acute Dermal LD-50	Guideline	IV	416280-02
Acute Inhalation	Guideline	III	416280-03
Primary Dermal Irritation	Guideline	III	416280-04

The dermal sensitization study was rated "supplementary" since the reviewer was unable to reach an objective decision. in the report showed that the test material was a weak sensitizer, however, this may or may not be the case since the report did not include data determining the highest non-irritating for concentration. In the absense of data, it is difficult to decide whether the product is a sensitizer or that the highest nonirritating concentration was not chosen for testing. Since the study used Buehler's method, the following excerpt from an article by Edwin V. Buehler and Harry L. Ritz may be helpful (Planning, Conduct & Interpretation of Guinea Pig Sensitization Patch Tests; Current Concepts in Cutaneous Toxicity, Academic Press, 1980):

It is often necessary to determine the primary irritancy of the test substance so that a non-irritating concentration may be chosen for response elicitation. For this purpose as many as four different concentrations of the test material in the appropriate solvent are applied as described for the induction procedure to four naive guinea pigs.

Hence, you must submit all pertinant data for the selection of the highest non-irritating dose as described in the preceding paragraph.

NOTE: Additional labeling changes may be required after the skin sensitization study is submitted.

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

Sincerely,

George T. LaRocca Product Manager (15) Insecticide Rodenticide Branch Registration Division (H7505C)

Enclosure

PERMANONE

MULTI-PURPOSE 10% E.C.

EPA REG. NO. 4816-688

EPA EST. NO. 279-NY-1

.90.0%

- * RECOMMENDED FOR AGRICULTURAL **COMMERCIAL USE**
- Broad Spectrum Multi-Use Insecticide
- Quick Knockdown
- For Use Outdoors and in Homes, Kennels, and Non-Food Areas of Commercial Buildings, Institutions, Warehouses, Theaters, Office Buildings, Schools, Motels, Hotels, Restaurants, and Food/Feed Processing Establishments.
- Kills Gypsy Moth Caterpillars and Japanese Beetles.
- For Control of Fleas, Brown Dog Ticks On Premises and On Dogs
- Residually controls Fleas and Ticks on Dogs for 35 Days
- Aids in Control of Ticks on Dogs for an Additional 2 Weeks

ACTIVE INGREDIENT:

*Permethrin: (3 phenoxyphenyl) methyl (+/-) cis/trans 3-(2,2-dichloroethenyl) 2,2dimethyl cyclopropanecarboxylate..... HINERT INGREDIENTS.....

*Cis/trans ratio. Max 65% (+/-) trans and min. 35% (+/-)

†Contains Petroleum Distillates

PERMANONE - Registered Trademark of Fairfield American Corporation.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See side panel for additional precautionary statements.

NET CONTENTS:



FAIRFIELD **AMERICAN** CORPORATION

201 ROUTE 17 NORTH, RUTHER/ORD, AU 07C70

688 082990A

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE AND SPILL PROCEDURES: Store upright at room temperature. Avoid exposure to extreme temperatures, in case of spill or leakage, souk up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

PESTICIDE DISPOSAL! Pesticide, spray mixture or rinse water that cannot be used according to label instructions must be disposed of at or by 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 approved State and local procedures

CONTAINERS ONE GALLON AND SMALLER Do not reuse container. Wrap container in several layers of newspaper and discard in trash.

CORTAINCRO EXCIDENT THAN ONE CASTON Metail containers - Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers -Triple rinse or equivalent, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke. Glass Containers - Triple rinse or equivalent, then dispose of in a sanitary landfill or by other approved state and local procedures.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Remove and wash dothing before reuse. Avoid contamination of food

Wear full-faced gas mask with canister type recommended for genural insecticide protection for applying indoors as a space spray or fog

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED. Promptly drink a large quantity of milk, egg whites, gelatin solution, or, if these are not available, drink large quantities of water. Avoid alcohol. Call a physician or Poison Control Center immediately. Do not induce vomiting unless under a physician's care. This product contains petroleum distillate. Vomiting may cause aspiration

IF INHALED: Remove person to fresh air. Apply artificial respiration if

IF ON SKIN. Remove contaminated dothing and wash affected areas with plenty of soap and water.

IF IN EYES. Flush eyes with plenty of water, Call a physician if irritation. persists.

ENVIRONMENTAL HAZARDS

This product is highly toxic to fish. Avoid direct applications to lakes. streams, ponds, tidal marshes and estuaries. Do not apply where runoff is likely to occur. Do not apply when wind speeds exceed 10 mph. Do not contaminate water when disp Shrimp and crab may be killed if app label are exceeded. Use with cautio ces. This pesticide is highly toxic to or to residues remaining on the trea or allow drift when bees are actively: tions should be timed to provide the i treatment and the next period of be-

PHYSICAL

Do not use or store near heat or ope or on electrical equipment due to the

Buyer assumes all risks of use, stor in strict accordance with directions

DIRECTION

It is a violation of Federal law to use t with its labeling.

To prepare dilutions, the concentra well. Add the required amount of co thoroughly. Do not hold dilutions for

For maximum effectiveness, a comi space treatment is recommended. aquaria before spraying

Do not use in food/feed areas of t restaurants or other areas where for processed. Do not use in serving at is in operation. Serving areas are are such as dining rooms but excluding a or held. In the home, all food proce be covered during treatment or thoro food/feed should be covered or rem NON FOOD/FEED AREAS including lavatories, floor drains (to sewers) e rooms, machine rooms, boiler rooms (after canning or bottling).

Do not apply to classrooms when it patient rooms or in any rooms when

Do not allow spray treatment to co poultry ranges or water supplies. I forage or pasture.

INDOOR USE AREAS AIRCRAFT **BAKERIES** BEYERAGE PLANTS **CANNERIES** FLOUR MILLS FOOD PROCESSING PLANTS **GRAINELEVATORS GRANARIES HOMES** HOSPITALS (non-patient areas) HOTELS INDUSTRIAL INSTALLATIONS

SEE REVERSE FOR SPEC

APPLICATION SITES	PESTS CONTROLLED	USE DIRECTIONS	DILUENT	DILUTION RATE	APPLICATION RATE	DOSE RATE
All A SURFACE SPRAY Aircraft, Balteries, Beverage Plants, Canneries, Flour Mills, Food Processing Plants, Grain Elevators, Granaries, Homes, Hospitals, Hotels, Industrial Installations, Kennels, Meat Packaging Plants, Motels, Office Buildings, Railroad Cars, Restaurants, Schools, Ships' Holds, Supermarkets, Truck Trailers, and Whiehouses.	Frebrats, Spiders, Crickets, Milipedes, Centipedes, Sowbugs, Palburs, Clover Miles, Channe Miles, Granary Weevils, Rice	For initial clean up of anyone insect infestallenss. Use a good sprayer adjusted to deliver a coarse well spray. Direct the spray into hiding places, or acks and drovious, under pallets, around containers of stored foods, around the base of machinery and behind shakes and dravers. Spray bookcases for Silverish. Spray antitiats, neets and points of entry.	Water	1 part concentrate in 10 parts water (13 ff cun- ces per gallon)	1 gallon to 750 square feet of sur- face	
		For normal infectations: Use a good sprayer adjusted to deliver a coarse set spray. Direct the scray into teding places, cracks and previous, under pallets, around containers of stored loods, around the base of machinery and behind shelves and drawers. Spray bookcases for Silverfish. Spray and trails, sests and points of entry.	Waler	From 1 to 2 parts con- centrals to 40 parts water (3.25 - 6.50 fl ounces per gallon)	1 gallon to 750 square feet of sur- face	
	Cwpet Beetles	Spray edges of carpiting and under carpeting and rugs. Make localized application to floor and baseboards. Spray directly into cracks, closest and intested area of shelving. Repeat treatment as necessary.	Water	1 pan concentrate to 20 parts water (6.5 fl. oun- ces per gallon)		
	Bedbugs	Spray materiales lightly particularly around fulfs and seams. Take beds apart and spray in all parts. Treat baseboards, mouldings and floors. Allow all treated arbides to thoroughly dry bulconuse. Repeat treatment as needed	Water	1 part concentrate in 20 parts water (6.5 ft our- ces per gallon)	_	
	Fluas and Ticks (Adults and Larvae)	Thoroughly spray infected areas, pelibeds, resting quarters, meanly oracles and creeces, along and behind baseboards, moutdings, window and door traves, and localized areas of floor and floor covering. Fresh bedding should be placed in animal quarters following treatment.	Water	From 1 to 2 parts cor- centrals to 40 parts water (3.25 - 6.50 f. current per gallers)		
		ON DOGS: To control fleas, fichs - Start spreying at the bill, moving the depender rapidly and making sure that the animals entire body is covered, including the legs and underbody. Whate spraying, fluid the hair so that the apray was that ought Do not spray in eyes and toos. Avoid contact with genistifie. Repeat as necessary. Do not use on old, soit or debitated minute. NOTE: NOT RECOMMENDED FOR USE ON PUPPLES LESS THAN FOUR WEEKS OLD.	Water	1 part concentrate in 17 parts water (7 0 fluid execut per gallon)		
Trees and Shrubs	Gypsy moth caterpillars and adults, adult Japanese beetles and Eastern and pest tent caterpillars	Apply to ensure thorough coverage of upper and lover surfaces. On trees and shrute. Treat trees and shrutes as insects emerge (Veually spring). Treat leaves, brances and tree trunks evenly, making save to penetrate dense foliage. Repeat application set foliage for out-off. On roses and in these guidens: Treat plants and flowers as soon as insects appear. Spray plants and flowers making sure to penetrate dense totage. Repeat application every 7 days or as recessary for control.		1 part concentrate in 40 parts water (3 2 ff cur- ces per gallon of water)		
Walls, ceilings, moldings, screens, door frames, beams, light cords, and similar resting places.	Mosquitoes, Wasps, Gnals, Skippers	Treat sur laces using coarse wet spray. Spray to fun oil	Water	1 part concentrate in 20 parts of water (6.5 fi ounces, per 1 gallon of water)		
LIVESTOCK SPRAY: Darry & Beef Cartie, Sheep, Goals, Shone, Horses and Poulity. (For swine, do not ship animals for slaughter within 5 days of last treatment.)	Horn Fiss, House Files, Mosquitoes And Gnats	Apply to well the hair thoroughly, with particular ellention to topline, underline, Banks, withers, and other infested areve. Repeat treatment at intervals of 5 to 12 days for small insect populations or as needed when lives are emerging in large numbers.		1 part concentrate in 20 parts water (6.5 fl. cur- ces per gallon)		
	Stable Fise, Horse Fise And Deer Fise Face Fise	Apply a quart per adult around to well the hair from out you'll perfoul ar estantion to the legs, faints, barrel, opine and other body evens commonly attached by use five. Repeat tracherent an resided. Apply using apply which produces large weeting droplets. Apply to the face of	1	I part concentration 20 parts water (6.58 min- ces per gallon)		
	Poultry Lice	the arranal in the morning before releasing to pasture. Apply sufficiently to well the face but not more thin 1.5 curious per arranal. Repeat daily as needed. Spray roose, walls and needs or ougus floroughly. This should be followed by		parts water (6.5 fl. eur- ose per gallon) I part concentrate in 20		ļ
	Bedbugs and Mites in poultry houses	apraying over the brde with a fine wast. Spray cremost of roost poles, cracks in walls and cracks in mate where the bedougs and make hide.	Water	perto water (4.5 fl our- ces per gallon) 1 part concentrate in 20 parts water (6.5 fl our-		
	Sheep **rck* or ked	Thereuphly wet all portions of the body by dipping or by upraying with sufficient pressure and with a nozzle adjustment to give penetration of the wood. Treat at a rate sufficient to well the animal		ces per gallon) 1 part concentrate x 20 parts water (6.5 ff our-		
	Fleas on Livestock (To luli and to protect against reinfestation)	a rate summer to east the arrenal Wat the arrenal by depung or spraying	Water	one per gallon) 1 perf concentrate in 20 parts water (6.5 8 cur- ces per pailon)		
	Files, Mosquitoes and Gnats in Ba 1s, Millung Parlors, Mill. Ronms, Danies and Poutry Houses	Apply as a log or fine work, directing the spray toward the onling and upper corners until the area is filled with mail, using about 2 ounces per 1000 cubic lest of space. For best results, dose doors and windows before spraying and supply from closed for ten to lifteen minutes. Vaccile the treated area and verificate before recooppying. Repeat treatment as necessary.		1 part concentrate in 20 parts water (6.5 fl cun- one per gellon)		

APPLICATION SITES	PESTS CONTROLLED	USE DIRECTIONS	DILUENT	DILUTION RATE	APPLICATION RATE	DOSE RATE
AS A SPACE SPRAY						
Bakeries, Beverage Plants, Canneries, Flour Mills, Food Processing Plants, Granunes, Homes, Hospitals, Hotels, Industrial Installations, Kennels, Meat Packaging Plants, Motels, Office Buildings, Pailroad Care, Restaurants, Schools, Ships' Holds, Supermarkets, Fruck Trailers, Warehouses.	House Flee, Fruit Flee, Gnats, Mosquetoes, Skepper Flees, Wasps, Hornets, Bees, Blackflees, Small Flying Moths.	Apply with mechanical or compressed air equipment (non-thermal) edjusted to deliver a line must. Close doors and emdows and shut off veriblating systems. When using an oil eliketion for space spraying, extinguish all flames and pilot is this when applying.	Oil or Water	i part concentrate in 20 parts oil or water (6.5 fixed cursoes per gallon)	1 ounce per 1000 cubic feet	
ngrass, 1700 (172001), Walenouses.		For rapid control of Houseflies, Fruit Ress, Crists, Masquitoss, Shipper Flee, Waspa, Homets, Bees, BackSies, Small Plying Motha, direct spray at an upward angle distributing it unto mly through the entire area at a rate of 1 curton per 1000 cubic feet of space. Keep area closed for at least 10 minutes. Vacate areas after treatment and ventilate and sensing up dead resects before recompying.		4		
		For rapid hall of exposed or accessible stages of or er insects named on the label, apply using conventional, mechanical or ourspressed air equipment (non-thermal) following directions for space spraying				
Animal Houses, Corrals, Drive in Restaurants, Drive in Theaters, Feedots, Gardens, Golf Courses, Parks, Playgrounds, Recreational Areas, Urban Areas, Zoos, Etc.	Mosquitoes, Gnats, biting and non-biting Midges, Blackfles, and other biting Fless.	Apply using vehicle mounted UEV equipment to create an intesticidal evallity. For best results apply when here is a light breaze (ie about 5 sight) and apply in direction of breaze to obtain maximum swith and better detribution. Do not as a 100 max.	Oil or Water	I part concentrate with I part suitable oil sol- vent, or all proportional oil dilutions outsulated	Dependent of swath width, flow rate and speed of vehicle.	Up to 0 007 ibs of active in- gredient per acre.
		The target dose rate to be applied in up to 0 007 lb. air per acre. This can be achieved under different conditions by altering the flow of viscotoxie from the equipment and/or the speed of this vehicle. Apply 3.5 to 7.0 fluid curvons per minute at vehicle appeals of 5.10 miles per hour using aviath widths of 150-300 feet as appropriate to local conditions.		on the base of vehicle speed and see in width to activate the target dose.		
		At higher vehicle speeds flow rates should be increased proportionality to achieve the target dose rate.				
		Not to be used within 100 feet (30 meters) of lares and streams. In treatment of corrals, feed lots, tevne lots and zoos, cover any exposed.				
		durking water, denking buntiers and animal lead before application. Allow 24 hours before retreating. Do not apply more than once in a 24 hour.				
		parried				
BARRIER SPRAY Penimeter of residential yards, public facilities, paths, and recreatives areas.	As an aid in reducing mosquito annoyance. To luft and control biting and non-biting midges, deer thes and other biting fless.	Apply when wallung at a speed of approximately 2 righ or a swaith of 50 feet treating approximately 0.2 acretinizes	Od or water	I part concentrate to 1 part of a militable allumit, or all propertion- al disklors calculated	Apply 17.5 fluid oun- ces of diluted material per acre	Approx 0.1 to, per acre
				on the busin of ap- plicates uponed and steath width to achieve the target dose		
			ļ			