



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 21 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Warren L. Smith
FMC CORP.
ACG SPECIALITY PRODUCTS
1735 MARKET STREET
PHILADELPHIA, PA 19103

Subject: Label Amendment Submission of 01/12/94 in Response to PR Notice 93-7
EPA Reg. No. 279-3027
AMMO 2.5 EC INSECTICIDE

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is **accepted**. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Send to EPA one (1) copy of the final printed labeling:

- BEFORE selling or distributing any product bearing the final printed labeling
- AND
- WITHIN one year from date of this acceptance.



Recycled/Recyclable
Printed with Soy/Canola Ink on paper that
contains at least 50% recycled fiber

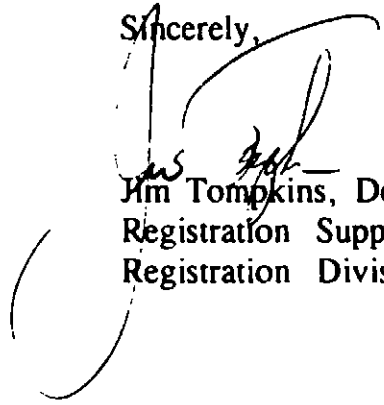
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Attachment

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division

Warren L. Smith
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PHILADELPHIA PA 19103

Comment for: EPA Reg Nr.279-3027
AMMO 2.5 EC INSECTICIDE

The following specific comments pertain to your WPS
labeling submission concerning the product
cited above:

No comment.

Code 537

RESTRICTED USE PESTICIDE

Toxic to fish and aquatic organisms
For retail sale to, and use only by, Certified Applicators or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

4 7 6
Net Contents

Ammo[®] 2.5 EC Insecticide

EPA Reg. No. 279-3027

EPA Est. 279-

Active Ingredient

* Cypermethrin **30.6%
Inert Ingredients***69.4%
	<u>100.0%</u>

*(±) α-Cyano (3-phenoxyphenyl)methyl (±) *cis/trans* 3-(2,2-dichloroethyl)-2,2 dimethylcyclopropane carboxylate
***Cis/trans* ratio: Max. 55% (±) *cis* and min. 45% (±) *trans*
***Contains xylene range aromatic solvents.

Contains 2.5 pounds cypermethrin per gallon.
U.S. Patent No. 4,024,163

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID

If swallowed: Do not cause vomiting. Call a physician.

If on skin: Wash thoroughly with soap and water.

If in eyes: Flush eyes thoroughly with water. If signs of irritation persist, contact physician.

If inhaled: Exposure to vapor or dust may cause tingling or numbness of exposed areas, especially the face, but this is temporary and requires no treatment. Lung irritation from breathing vapors is possible, and medical attention should be obtained if it is severe.

Note to Physician:

Like the natural pyrethrins, the synthetic derivative is expected to have relatively minor toxicity in humans; in fact, any significant acute toxic effects are more likely from a carrier hydrocarbon solvent. Consequently, induction of vomiting may increase the likelihood of the most important toxic potential, chemical pneumonia, and so should either be avoided or done only under medical supervision. Ingestion of a large amount calls for gastric lavage, with care (Trendelenburg position, suction available, cuffed endotracheal tube if patient is unconscious) to avoid intrapulmonary aspiration. A saline cathartic (sodium or magnesium sulfate), 15-30 gm. dissolved in water should be given, as should 15-20 gm. activated charcoal as a slurry in water. Digestible fats, oils or alcohol may increase absorption and so should be avoided. Skin contact (vapor or powder) may be followed by transient tingling or numbness, usually of the face, but this subsides without treatment.

For Emergency Assistance Call (800) 331-3148

See other panels for additional precautionary information.

BEST AVAILABLE COPY



FMC Corporation
Agricultural Chemical Group
Philadelphia PA 19103

12/93

PRECAUTIONARY STATEMENTS Hazards to Humans (and Domestic Animals)

Caution

Harmful if absorbed through skin, inhaled or swallowed. Causes eye irritation. Avoid breathing vapor or spray mist. Avoid contact with skin, may cause sensitization reaction in some individuals. Avoid contact with eyes or clothing.

Product should be opened and poured in a well ventilated area.

Personal Protective Equipment:

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical resistance category selection chart.

Handlers who may be exposed to the dilute through application or other tasks must wear: Coveralls over short-sleeved shirt and short pants, Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton, Shoes plus socks, and Protective eyewear.

Handlers who may be exposed to the concentrate through mixing, loading, application or other tasks must wear: Coveralls over short-sleeved shirt and short pants. Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton, Shoes plus socks, Protective eyewear, and Chemical-resistant apron when mixing or loading.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations

Users should:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Environmental Hazards

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

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are visiting the treatment area.

Physical/Chemical Hazards

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.

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

ACCEPTED
with COMMENTS
in EPA Letter Dated

MAR 21 1994

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

279-3027

Chemigation Use Directions

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move/irrigation systems. Do not apply this product through any other type of irrigation system. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

Crop injury, lack of effectiveness, or illegal residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers, or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump motor must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Ammo® 2.5 EC insecticide should be applied continuously for the duration of the water application. Ammo 2.5 EC should be diluted in sufficient volume to insure accurate application over the area to be treated. When using chemigation, a minimum of 0.5 inch per acre of irrigation water is recommended. Agitation is not required when a suitable diluent is used.

GENERAL INSTRUCTIONS

Rotational Crops

Rotational crops may be planted within 30 days after last application.

Use low rate under light to moderate infestation. Higher rates should be used under heavy insect pressure. The rate of application is variable according to insect pressure, timing of spray and field scouting.

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Resistance. Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

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.

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 the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: Coveralls over short-sleeved shirt and short pants, Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton, Shoes plus socks, and Protective eyewear.

STORAGE AND DISPOSAL

Pesticide Storage

Do not store below 10°F, (-12°C).

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call FMC (800-331-3148).

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

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 of the nearest EPA Regional Office for guidance.

Container Disposal

Metal 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. Do not cut or weld metal containers.

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Returnable/Refillable Sealed Containers: Do not rinse container. Do not empty remaining formulated product. Do not break seals. Return intact to point of purchase.

CROP	PEST	DOSAGE		REMARKS
		LB A/A	FLOZ/A	
Cotton	Cutworms Tobacco Thrips Soybean (banded) Thrips	0.025 to 0.1	1.3 to 5	Ammo® 2.5 EC may be applied in water or refined vegetable oil. When water is used, apply a minimum of one gallon of finished spray per acre by air or five gallons of finished spray with ground equipment. When applying in water by air, one quart of emulsified oil may be substituted for one quart of water in the finished spray. When using oil, use a minimum of one quart per acre in the finished spray. Ammo 2.5 EC may be injected into overhead sprinkler irrigation water provided 1) an anti-backflow check valve is present between the injection port and the water source, 2) a check valve is present in the line to prevent irrigation water from entering the chemical supply tank and 3) the irrigation injection system has interlocking on-off switches. For boll weevil control, apply Ammo 2.5 EC at a 3 to 4 day interval until pest numbers are reduced to acceptable levels. A maximum of 0.6 lb. active ingredient may be applied per acre per season. Ammo 2.5 EC may be applied within 14 days of harvest. Do not graze or feed cotton for forage.
	Boll Weevil Cabbage Looper Cotton Bollworm Cotton Fleahopper Cotton Leaf Perforator European Corn Borer Fall Armyworm Lygus Bugs Other Plant Bugs Pink Bollworm Saltmarsh Caterpillar Tarnished Plant Bug Tobacco Budworm White Flies* Yellow Striped Armyworm	0.04 to 0.1	2 to 5	
	Beet Armyworm**	0.06 to 0.1	3 to 5	

*Aids in control.

**For control of beet armyworms only in the high plains of Texas, Arizona, and California.

Spray Drift Precautions—Cotton

Do not make more than 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Synthetic pyrethroid products include Ambush®, Ammo®, Asana® XL, Baythroid®, Capture®, Danitol®, Fury®, Karate®, Mustang, Pounce® and Scout® X-TRA.

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

Do not apply by ground equipment within 25 feet, or by air within 150 feet of lakes; reservoirs, rivers, permanent streams, marshes or natural ponds, estuaries, and commercial fish farm ponds. Increase the buffer zone to 450 feet when ultra low volume (ULV) application is made.

For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of wing span or rotor diameter.

Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.

Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.

Make aerial or ground applications when the wind velocity favors on target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.

Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Do not cultivate within 10' of the aquatic area so as to allow growth of a vegetative filter strip.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.

Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

CROP	PEST	DOSAGE		REMARKS
		LB/A/A	FLOZ/A	
Lettuce (Head)	Com Earworm Cucumber Beetles Cutworms Diamondback Moth Flea Beetles Imported Cabbageworm Leafhoppers Lygus Bugs Salt Marsh Caterpillar Tobacco Budworm	0.05 to 0.1	2.5 to 5	Apply in water as necessary for insect control using a minimum of 15 gallons of finished spray per acre with ground equipment and 5 gallons per acre by air. Lower rates of Ammo 2.5 EC should be used under light to moderate insect pressure. Higher rates should be used to control heavy to extremely heavy insect populations. A maximum of 0.6 lb. active ingredient may be applied per acre per season. Do not apply within 5 days of harvest. In areas where arid climatic conditions persist, such as California and Arizona, higher than minimum recommended rates may be required.
	Amyworms Crickets Loopers Onion Thrips Stinkbugs	0.075 to 0.1	3.75 to 5	
Pecans	Black Pecan Aphid Hickory Shuckworm Pecan Nut Casebearer Pecan Weevil Yellow Pecan Aphid	0.06 to 0.10	3 to 5	Applications at the lower rate should be made when pest populations are low. Rates should be increased as the pest pressure increases. Apply by ground equipment to the point of drip. Use 100 gallons of dilute spray per acre for smaller trees. For larger trees which require higher gallonage to achieve adequate coverage, apply in 200 to 300 gallons of water. In order to calculate the correct number of gallons of water needed to spray one acre of your trees to the point of drip, you may need to conduct a test. If you do not know how to conduct such a test with your equipment, you should request assistance from your equipment dealer. Up to 0.6 lb active ingredient per acre season may be applied prior to shuck split. Do not apply within 21 days of harvest. Do not graze livestock in treated orchards or cut treated cover crops for feed.

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Tank-Mixture

Ammo® 2.5 EC insecticide may be applied in tank mixtures with other products approved for use on cotton. Observe all restrictions and precautions which appear on the labels of these products.

For improved control of aphids and mites, Ammo 2.5 EC may be tank-mixed with Curacron® 6E. The tank-mixture is most effective when pest populations are first observed. Subsequent applications may be needed to maintain control.

Dealers Should Sell in Original Packages Only.

Terms of Sale or Use: On purchase of this product buyer and user agree to the following conditions:

Warranty: FMC makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Except as so warranted, the product is sold as is. Buyer and user assume all risk of use and/or handling and/or storage of this material when such use and/or handling and/or storage is contrary to label instructions.

Directions and Recommendations: Follow directions carefully. Timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the seller and are assumed by the buyer at his own risk.

Use of Product: FMC's recommendations for the use of this product are based upon tests believed to be reliable. The use of this product being beyond the control of the manufacturer, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice.

Damages: Buyer's or user's exclusive remedy for damages for breach of warranty or negligence shall be limited to direct damages not exceeding the purchase price paid and shall not include incidental or consequential damages.

Ambush, Cymbush and Karate—Trademarks of ICI Americas Inc.
Asana—Trademark of E.I. duPont de Nemours and Co., Inc.
Baythroid—Trademark of Bayer AG
Curacron—Trademark of Ciba-Geigy Corporation
Scout—Trademark of Hoechst Roussel Agri-Vet Company
Ammo, Captu, 3, Pounce and —Trademarks of FMC Corporation
FMC (537-11/15/93-A)