

PM 19

352-553

1 of 4



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number: 352-553  
Date of Issuance: 09-18-95

Term of Issuance: Conditional  
Expires 09/18/98

Name of Pesticide Product: DuPont  
Fortress® Technical

NOTICE OF PESTICIDE:  
  X   Registration  
       Reregistration

(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):  
E.I. du Pont de Nemours & Company  
Agricultural Products  
Walker's Mill, Barley Mill Plaza  
P.O. Box 80038  
Wilmington, Delaware 19880-0038

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

The Agency is conditionally registering the above referenced product under the authority of Section 3(c)(7)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. This allows a 3-year time limited registration on corn, to expire automatically on September 18, 1998. In addition, during the period that this registration is effective, it will be subject to the conditions listed below. To maintain your registration you must:

1. Submit the following required new studies; and/or additional studies DuPont intends to conduct, repeat, or upgrade which are needed to refine the Agency's risk assessment (with prior Agency approval of protocols for all studies):
  - A new acute neurotoxicity study with Fortress® Technical, by the gavage route, in the rat -- which includes a histopathological exam (following perfusion); evaluation of plasma, erythrocyte, and brain cholinesterase activities following a single dose of the test material; and, body temperature evaluations;
  - A neurotoxic esterase (NTE) study in the hen, including an assay of NTE activity (as per the 1991 Neurotoxicity Guidelines);
  - A repeat-dose dermal toxicity study (that includes monitoring of cholinesterase) conducted with the Fortress® 5G product;

Signature of Approving Official:  
*DHE*

Date:  
*SEP 18 1995*

--A repeat-dose inhalation toxicity study (that includes monitoring of cholinesterase) conducted with the Technical material;

--An exposure study for Fortress® 5G with measurements of chlorethoxyfos concentrations in the air and dermal exposure to loaders during the transfer of the SmartBox™ (with 5G product) system. Plus, a study in which the measurement of chlorethoxyfos concentration inside the tractor cab, during application of the 5G product, while the applicator is being monitored for both dermal and inhalation exposure;

--Calculations of the evaporate flux to upgrade the Field Volatility study to acceptable (to give a more practical rate of volatilization with respect to time as opposed to instantaneous measurements); and,

--(Repeated) Fish early life-stage with Sheepshead minnow study.

2. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

3. Make the following label change:

a. Revise the EPA Registration Number to read, "EPA Reg. No. 352-553".

4. Submit two copies of the revised final printed label for the record.

You should note that if you fail to satisfy any of the conditions imposed on this registration, e.g. you fail to submit the required data or the data submitted were not generated in accordance with the applicable Agency guidelines and/or approved Agency protocols, EPA may issue a Notice to Cancel this registration under Section 6(e) of FIFRA.

You should also note that, regardless of whether you satisfy all application conditions, this conditional registration will expire automatically on September 18, 1998. Sales and distribution of the subject product bearing labeling for use on corn after September 18, 1998 will be illegal.

**BEST COPY AVAILABLE**

page 3  
EPA Reg. No. 352-553

3 3/4

The Agency will not renew or extend this registration; and/or issue a full registration under Section 3 of FIFRA, until the additional data have been submitted, reviewed and found acceptable.

Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

DHE

Dennis H. Edwards, Jr.  
Product Manager 19  
Insecticide & Rodenticide Branch  
Registration Division (7505C)

Enclosure

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4 of 4

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# FORTRESS® TECHNICAL

## FOR FORMULATION USE ONLY

ACTIVE INGREDIENTS	BY WEIGHT
PHOSPHOROTHIOIC ACID, O,O-DIETHYL O-H-2,2,2-	
TETRACHLOROETHYLENE	85%
INERT INGREDIENTS	12%
TOTAL	100%

EPA REG. NO. 352-XXX EPA Est. No. 352-XXX

**KEEP OUT OF REACH OF CHILDREN**

**DANGER!** **POISON**

**PELIGRO** PRECAUCION AL USUARIO: Evitar el contacto con los ojos, la piel y la ropa.

**STATEMENT OF PRACTICAL TREATMENT**

ATROPINE IS THE EMERGENCY ANTIDOTE FOR FORTRESS INSECTICIDE POISONING. 2-PAM is the antidote and may be used in conjunction with atropine. CALL A PHYSICIAN AT ONCE IN ALL CASES OF SUSPECTED POISONING.

**IF SWALLOWED** - Induce vomiting immediately by giving two glasses of water and touching back of throat with finger. Call a physician. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

**IF ON SKIN** - Immediately remove patient from vicinity of the insecticide, remove contaminated clothing and shoes, and wash skin thoroughly with soap and running water. Thoroughly wash contaminated clothing before reuse.

**IF IN EYES** - Hold eyelids open and immediately flush eyes with plenty of water. Get medical attention.

**IF INHALED** - Remove patient to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if breathing has stopped. Get medical attention.

**IF WARNING SYMPTOMS APPEAR** (See WARNING SYMPTOMS Under NOTE TO PHYSICIAN) Keep patient prone and quiet. Start artificial respiration immediately if patient is not breathing. Transport patient immediately to hospital.

For medical emergencies with this product, call toll free 1-800-441-3637.

**PRECAUTIONARY STATEMENTS**  
**HAZARDS TO HUMANS**

**DANGER!** **POISON**

MAY BE FATAL IF SWALLOWED, INHALED, OR ABSORBED THROUGH THE SKIN. DO NOT BREATHE VAPOR. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING.

**PRECAUTIONS IN USING**  
**HANDLE THIS PRODUCT ONLY WHEN WEARING THE FOLLOWING PROTECTIVE CLOTHING AND EQUIPMENT:** Wear a protective suit of one or two pieces that covers all parts of the body except the head, hands, and feet. Wear chemical resistant gloves, chemical resistant apron, and chemical resistant shoes or shoe coverings. Wear goggles or a face shield. Wear a pesticide respirator approved by the Mining, Enforcement and Safety Administration and the National Institute for Occupational Safety and Health when handling or equipment or otherwise handling the product. Wash thoroughly with soap and water after handling and before eating or drinking. Remove contaminated clothing and wash before reuse. Chemical resistant gloves, apron, shoes or shoe coverings should be washed with soap and water after each use. Do not use the same gloves for other work. Destroy and replace gloves frequently.

Repeated exposure can lead to an asymptomatic increase in the susceptibility to poisoning. Avoid prolonged exposure to the product.

In case of accidental contact, immediately remove contaminated clothing and wash affected skin thoroughly with soap and hot water. Launder clothing and decontaminate footwear before reuse. Wash face, arms, and hands thoroughly with soap and hot water before eating, drinking or smoking. Bath or shower at the end of the work day and change into freshly laundered clothing.

**NOTE TO PHYSICIAN**

**WARNING SYMPTOMS:** FORTRESS is an organophosphate insecticide and is a cholinesterase inhibitor. Overexposure to the product may cause toxic signs and symptoms due to stimulation of the cholinergic nervous system.

Symptoms of poisoning may include weakness, headache, tightness in chest, blurred vision, non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhea, muscle tremors and abdominal cramps. In severe cases, convulsions, unconsciousness and respiratory failure may occur.

**TREATMENT:** Atropine is the specific therapeutic antagonist of choice against this type of parasympathetic nervous stimulation.

If warning symptoms appear, treatment should consist of parenteral atropine sulfate. This can be administered intravenously every 10 minutes until full atropinization (as indicated by dilated pupils, dry flushed skin and tachycardia) has been achieved and repeated thereafter whenever symptoms reappear. For infants and children, the dose of atropine sulfate is 0.05 mg/kg. For adults, 1 to 2 milligrams will be required for mild cases, but up to 4 mg may be needed for severe intoxication. 20 to 30 milligrams or more may be required during the first 24 hours.

Phosphoramide chloride (2-PAM chloride) may also be used as an effective antidote in addition to and while maintaining full atropinization. In adults, an initial dose of 1 gram of 2-PAM should be injected, preferably as an infusion in 250 cc of saline over a 15- to 30-minute period. If this is not practical, 2-PAM may be administered slowly by intravenous injection as a 5 percent solution in water over not less than two minutes. After about an hour, a second dose of 1 gram of 2-PAM will be indicated if muscle weakness has not been relieved. For infants and children, the dose of 2-PAM is 20-50 mg/kg. Morphine is an appropriate treatment.

Clear chest by postural drainage. Oxygen administration may be necessary. Observe patient continuously for 48 hours. Repeated exposure to cholinesterase inhibitor may, without warning, cause prolonged susceptibility to very small doses of any cholinesterase inhibitor. Allow no further exposure until cholinesterase regeneration has been assured as determined by blood test.

For medical emergencies involving this product, call toll free 1-800-441-3637.

**ENVIRONMENTAL**  
This product is toxic to fish, birds, lakes, streams, ponds or public water. Do not discharge effluent into sewer plant authorities. For guidance call...

**DIRECTION FOR USE**  
It is a violation of Federal law to use this product for formulation into an insecticide.  
Only for formulation use:  
1. For the following uses:  
Terrestrial Food Crops:  
Corn (before ear), lettuce, alfalfa, truck, mushroom, tomato, tobacco.  
2. Uses for which USEPA has approved but not submitted in support of registration.  
3. Uses for experimental purposes only.  
Formulators using this product are responsible for...

**STORAGE AND DISPOSAL**  
**STORE PRODUCT IN ORIGINAL CONTAINER.** PESTICIDES, FERTILIZERS, FOOD OR FEED SUPPLEMENTS.  
**STORAGE:** Store in a secure, locked container. Do not transport or store near food, feed, or other products.  
**PRODUCT DISPOSAL:** Pesticides or fertilizers or other products are the property of the Central Agency, or the Manufacturer's Representative.  
**CONTAINER DISPOSAL:** Triple rinse container and dispose of in a sanitary manner. In case of a significant spill, call...

**NOTICE TO BUYER:** Purchase of this product is restricted to the United States.

**NOTICE OF WARRANTY**  
Du Pont warrants that this product is reasonably fit for purposes stated on the normal use conditions. It is impossible to predict the effectiveness of this product on weather conditions, pest pressure which are beyond the control of Du Pont or indirect damages resulting from the use of this product. With regard to any term, Du Pont disclaims any liability related to DU PONT MAKES NO WARRANTY FOR PURPOSE NOR ANY OTHER CLAIM.

D-072892081792  
ACCEPTED with COMMENT in EPA Letter B

SEP 18 1992  
Under the Federal Insecticide, and Rodenticide Act, and Federal Food, Drug, and Cosmetic Act, this product is registered under EPA Reg. No. 352-XXX