

400-408

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

JUL 30 2007

Ms. Betsy Katzman
Chemtura Corporation
199 Benson Road
Middlebury, CT 06749

Dear Ms. Katzman:

Subject: Amendment-- Comply with risk reductions labeling specified in Disulfoton RED
Terrachlor Super X with Di-Syston
EPA Registration Number 400-408
Your submission dated September 17, 2004

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(7)(a), is conditionally acceptable provided that you:

1. Submit and/or cite all data or other material required for registration/reregistration of your product under FIFRA section 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling.
 - a. In the Restricted Use block, relocate RESTRICTED USE PESTICIDE to be centered as the first line in the block. Please note that there are minimum type size requirements for this heading, it must meet the minimum type size requirements for the signal word [see 40 CFR 156.10(h)(1)(iv)]. Also, add "oral" to the sentence "Due to acute oral toxicity".
 - b. In the ingredients statement, relocate the percentage declaration for Disulfoton to be in correct alignment with the other declared percentages.
 - c. The FIRST AID block (including the associated Note to Physician, with the Antidote and Emergency Assistance sections) must appear on the front panel of this product since it is in Toxicity Category 1 [see 40 CFR 156.68). If there are space constraints, which there does not appear to be since this is not sold in very small containers, then, at the minimum, there must be a front panel statement referring the user to the exact location of the FIRST AID block.

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- d. Under the heading **FIRST AID**, add "CONTAINS AN ORGANOPHOSPHATE INSECTICIDE THAT INHIBITS CHOLINESTERASE"
- e. Add the following as the first sentence in the Note to Physician: "This product contains an organophosphate insecticide that inhibits cholinesterase.". Then, revise "Warning symptoms" to "Poisoning symptoms" in the next sentence.
- f. In the Hazards to Humans text, after "Do not breathe dust." add "Repeated inhalation or skin contact may, without symptoms, progressively increase susceptibility to Disulfoton poisoning. Prolonged or frequently repeated skin contact may cause allergic reaction, in some individuals.". As the last sentence of this section, add "Wear the Personal Protective Equipment specified below."
- g. In the PPE section "In addition, loaders must wear" add "Chemical resistant apron" after "Chemical-resistant gloves". Add a space and then add as a separate next sentence "See Engineering Controls for additional requirements."
- h. In PPE section "Handlers engaged in those activities...", replace "and a NIOSJ-approved dust mist filtering respirator with any N, R, P or HE filter" with "and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter."
- i. Over the paragraph beginning "Discard clothing and other absorbent materials..." add the heading "User Safety Requirements".
- j. Replace the Engineering Controls section "In addition, loaders must wear:" with the following:

In addition, loaders must:

- wear the personal protective equipment required in the PPE section of this labeling (long sleeved shirt, long pants, shoes plus socks, chemical -resistant gloves, and a chemical resistant apron) and
- be provided and must have immediately available for use in an emergency, such as broken package, spill, or equipment breakdown: coveralls, chemical-resistant footwear and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter.

- k. In the Engineering Controls heading "Applications using motorized ground equipment...", revise "Applications" to read "Applicators" and in both places that respirator specifications are given revise the respirator text to read "and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any N, R, P or HE filter."

- l. At the end of the Engineering controls delete the sentence about pilots and the sentence about flaggers. Aerial application of this product is prohibited
- m. Add the paragraph "A level well maintained 25 foot vegetative buffer strip..." that appears in the Directions for Use to also appear at the end of first paragraph of the Environmental Hazards (i.e., before the "Surface Water Advisory").
- n. Under the heading DIRECTIONS FOR USE, add "Restricted Use Pesticide."
- o. Under Agricultural Use Requirements, delete all the Indoor Restrictions since there are no indoor uses for this product. Keep the "PPE required for early entry...etc." section.
- p. Under the precautions, replace the third sentence beginning "Do not exceed 2 lbs. of PCNB...etc." with Do not exceed 1 lb. of disulfoton active ingredient per acre per year applied as a granular formulation."
- q. Under use precautions, revise the statement to read "Application by hand held equipment is prohibited."
- r. Under Directions for Use, move the statements "Do not apply this product in a way that will contact workers....etc." and "For any requirements specific to your tribe....etc." to immediately above the Agricultural Use box.
- s. Add the following phrase to the beginning of the warranty paragraph, "To the extent permitted by applicable law"....seller warrants...etc."

A stamped copy of the label is enclosed for your records. Please submit five copies of the amended labeling bearing the above revisions to this office before you release the amended label for shipment. Also, please forward a copy of this letter together with a copy of your revised label to the EPA product manager (PM-21) for the other active ingredients present in this product.

Although EPA has determined that you fulfilled the requirements of the disulfoton RED for the subject product, this letter does not constitute reregistration for this product. This product will be reregistered once the data requirements and the risk reduction label requirements for this product specified in each of the REDs for the three active ingredients in this product have been satisfied.

Sincerely,

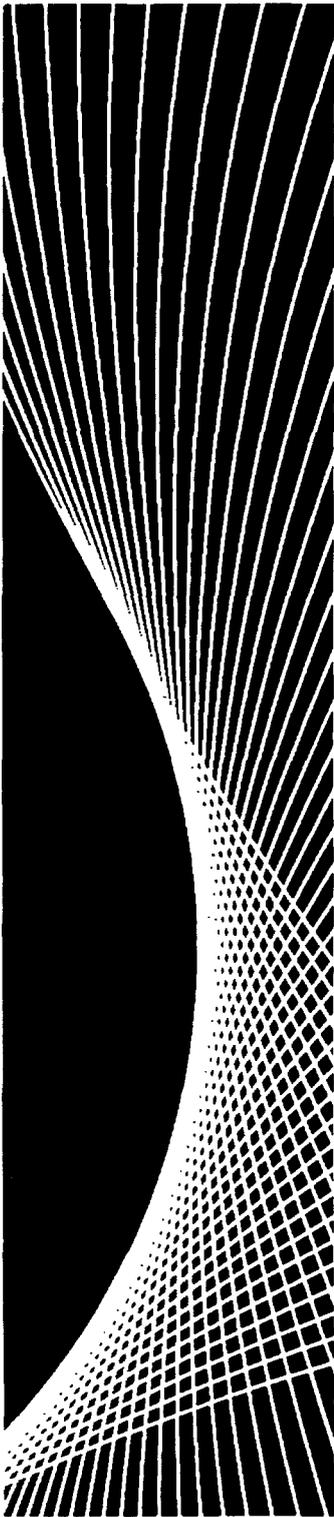
George LaRocca.
Product Manager 13
Insecticide Branch
Registration Division (7505P)

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Restricted Use Pesticide. **Due to Acute Toxicity.** 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.

Terraclor Super X[®] with Di-Syston[®]

Terraclor Super X with Di-Syston contains three active ingredients Terraclor[®], Terrazole[®] and Di-Syston[®]



**Granular Soil Fungicide
Systemic Organophosphate Insecticide**

**Net
Contents:**

COMPOSITION

Active Ingredients: (% by weight)

PCNB: Pentachloronitrobenzene	6.50%
Etridiazole: 5-Ethoxy-3-(trichloromethyl)-1,2,4-thiadiazole	1.63%
Disulfoton: O,O-Diethyl S-[2-(ethylthio) ethyl] phosphorodithioate*	6.50%
Inert Ingredients:	85.37%
Total:	100.00%

*U.S. Patent No. 2,759,010.

KEEP OUT OF REACH OF CHILDREN



**POISON
DANGER • PELIGRO**



Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

THIS PRODUCT CONTAINS AN ORGANOPHOSPHATE INSECTICIDE. RAPIDLY ABSORBED THROUGH SKIN. REPEATED INHALATION OR SKIN CONTACT MAY, WITHOUT SYMPTOMS, PROGRESSIVELY INCREASE SUSCEPTIBILITY TO DISULFOTON POISONING. ATROPINE AND 2-PAM ARE ANTIDOTES FOR DISULFOTON. CALL A PHYSICIAN IMMEDIATELY IN ALL CASES OF SUSPECTED POISONING.

**ACCEPTED
with COMMENTS
In EPA Letter Dated:
JUL 3 0 2007
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under EPA Reg. No.**

EPA REG. NO. 400-408
EPA EST. NO.
015/031606

Chemtura USA Corporation
Middlebury, CT 06749



www.chemtura.com

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FIRST AID

- IF SWALLOWED** • Call a poison control center or doctor immediately for treatment advice.
 - 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 ON CLOTHING**
 - Take off contaminated clothing.
 - Rinse skin immediately with plenty of water for 15 to 20 minutes.
 - Call a poison control center or doctor for treatment advice.
- IF INHALED**
 - Move person to fresh air.
 - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
 - Call a poison control center or doctor for treatment advice.
- IF IN EYES:**
 - Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
 - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
 - Call a poison control center or doctor for treatment advice.

NOTE TO PHYSICIAN: Warning symptoms include weakness, headache, tightness in chest, blurred vision, non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhea and abdominal cramps.

ANTIDOTE: Administer atropine sulfate in large therapeutic doses. Repeat as necessary to the point of tolerance. 2-PAM is also antidotal and may be administered in conjunction with atropine. Compound inhibits cholinesterase resulting in stimulation of the central nervous system, the parasympathetic nervous system, and the somatic motor nerves. Do not give morphine. Watch for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first sign of pulmonary edema, the patient should be placed in an oxygen tent and treated symptomatically. Repeated exposure to cholinesterase inhibitors may, without warning, cause increasing susceptibility to very small doses of any cholinesterase inhibitor. Allow no further exposure until cholinesterase regeneration has taken place as determined by blood tests.

EMERGENCY ASSISTANCE: Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

EMERGENCY PHONE	800-292-5898
SAFETY DATA AND INFORMATION	203-573-3303
TRANSPORTATION EMERGENCY (CHEMTREC)	800-424-9300

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER

Fatal if swallowed. May be fatal if inhaled or absorbed through skin. Causes moderate eye irritation. Do not get in eyes, on skin or on clothing. Do not breathe dust. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are made of any waterproof material. If you want more options, follow the instructions for Category A on an EPA chemical resistance category selection chart.

Handlers Using Engineering Controls Must Wear: Long-sleeved shirt and long pants; shoes plus socks.

In addition, loaders must wear: Chemical-resistant gloves.

Handlers engaged in those activities for which use of an engineering control is not possible must wear: Coveralls over long-sleeved shirt and long pants; chemical-resistant gloves; chemical-resistant footwear plus socks; chemical-resistant headgear (if overhead exposure) and a NIOSH-approved dust mist filtering respirator with any N, R, P, or HE filter.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(5)], the handler PPE requirements may be reduced or modified as specified by WPS.

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.

ENGINEERING CONTROLS

This product is packaged in a closed loading system and all loaders must use and maintain this system in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(4)].

In addition, loaders must wear: long-sleeved shirt and long pants; chemical-resistant gloves; shoes plus socks; Be provided and must have immediately available for use in an emergency, such as broken package, spill, or equipment breakdown; coveralls over long-sleeved shirt and long pants; chemical-resistant gloves; chemical-resistant footwear plus socks; chemical-

resistant headgear (if overhead exposure), and a NIOSH-approved dust mist filtering respirator with any N, R, P or HE filter. **Applications using motorized ground-equipment (except for motorcycles)** must use and maintain an enclosed cab for dermal protection in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(4)]. In addition, applicators using an enclosed cab must wear: long-sleeved shirt and long pants, shoes and socks and; either wear a NIOSH-approved dust-mist filtering respirator with any N, R, P, or HE filter or use an enclosed cab that is declared in writing by the manufacturer or by a government agency to provide at least as much respiratory protection as the type of respirator specified in the PPE section of this labeling; be provided and have immediately available for use in case of an emergency when they must exit the cab, the following PPE: Coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, chemical-resistant footwear plus socks, chemical-resistant headgear (if overhead exposure), and a NIOSH-approved dust-mist respirator with and N R, P, or HE filter.

Applicators re-entering the enclosed cab after spending time in the treated area must: take off any PPE that was worn in the treated area before reentering the cab, and store all such PPE in a chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab.

Pilots must use an enclosed cockpit in a manner that is consistent with the WPS for Agricultural Pesticides [40 CFR 170.240(d)(4)].

Human flagging is prohibited.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to birds, mammals, fish and aquatic invertebrates. Collect any granules spilled during loading or application. Do not apply directly to water, or to areas where water is present or to intertidal areas below the mean high water mark. This product has a high potential for runoff for several months. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. Cover or incorporate spills. This pesticide is toxic to bees exposed to direct application. Applications should be timed to coincide with periods of minimum bee activity, usually between late evening and early morning.

Disulfoton is known to leach through the soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

Surface Water Advisory: Etridiazole can contaminate surface water through spray drift. Under some conditions, etridiazole may have a high potential for runoff into surface water for several weeks post application. These conditions include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow ground water, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain surface water.

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.

A level, well maintained 25 foot vegetative buffer strip between areas to which this product is applied and permanent surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Refer to the March 2000 USDA Natural Resources Conservation Service document: *Conservation Buffers to Reduce Pesticide Losses* for additional guidance. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 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) notification to workers, and restricted-entry intervals. 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 48 hours. The REI is 72 hours in areas where average rainfall is less than 25 inches a year.

Exception: if the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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 worn over long-sleeved shirt and long pants
- chemical-resistant gloves made of any waterproof material
- chemical-resistant footwear plus socks
- chemical-resistant headgear (if overhead exposure)
- chemical-resistant eyewear

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated areas.

CALIBRATION

Granular applicators should be properly calibrated to deliver the desired amount of Terraclor Super X with Di-Syston per acre. Variations in physical characteristics of the product as well as the type and age of equipment make it essential/important to calibrate applicators prior to the start of each use season.

CALIBRATION PROCEDURE

1. Read the product label and select the desired rate. Higher rates should always be used when germination factors are expected to be unfavorable for rapid emergence.
2. Fill the granular hopper with Terraclor Super X with Di-Syston.
3. Attach a Chemtura calibration tube to each hopper box. Because delivery rates for each hopper box may vary, each box should be calibrated separately.
4. Mark off 300 feet. Drive that distance at normal operating speed and collect the granules delivered from each hopper.
5. Tap the tube to settle granules. Take reading on the tube - refer to the following chart for approximate rate per acre.

Tube Reading and Equivalent Ounces of Terraclor Super X with Di-Syston		POUNDS PER ACRE			
		row spacing (inches)			
		40	38	36	30
Q	5.4	14.7	15.5	16.3	19.6
P	5.1	13.9	14.6	15.4	18.5
O	4.8	13.1	13.8	14.5	17.4
N	4.5	12.2	12.9	13.6	16.3
M	4.2	11.4	12.0	12.7	15.2
L	3.8	10.3	10.9	11.5	13.8
K	3.5	9.5	10.0	10.6	12.7
J	3.2	8.7	9.2	9.7	11.6
I	2.9	7.9	8.3	8.8	10.5
H	2.6	7.1	7.4	7.9	9.4
G	2.2	6.0	6.3	6.6	8.0
Minimum drill planting use rate per row spacing.		12	12.6	13.3	16

The pounds per acre is based on 13068 linear feet of row using 40 inch rows, on 13756 linear feet of row using 38 inch rows, on 14520 linear feet of row using 36 inch rows or 17424 linear feet of row using 30 inch rows.

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COTTON

For control of Seedling Disease Complex - *Rhizoctonia*, *Pythium* and *Fusarium* and for early season control of thrips, aphids and mites.

Apply as a soil in-furrow application at planting time with a granular pesticide applicator properly calibrated to assure accurate placement and proper dosage.

The higher use rate should be used under the following conditions:

1. fields have heavy disease inoculum history
2. soils are cold or wet
3. no or low till programs are utilized

Application Method	Rate of Formulation	
	Lbs./drill row per acre	Lbs./1300 linear feet of row based on 40 inch spacing
DRILL PLANTING	12 to 15	1.2 to 1.5
HILL-DROP PLANTING	4 to 5	0.4 to 0.5

Soil temperature, moisture and till should be favorable for good germination and emergence. Systemic insecticides can possibly damage seed germination when placed on or very near the seed, however, the addition of a fungicide such as Terraclor Super X, considerably lessens this hazard.

USE PRECAUTIONS

Do not allow the feeding or grazing of cotton foliage by livestock.

Apply only at planting time. Do not exceed 2 lbs. of PCNB active ingredient per acre in any one season applied as spray or granular formulations.

Application by hand-held broadcast spreader (belly grinder); push-type spreader, powder dust blower, and dispersal by hand is prohibited.

Aerial applications are prohibited. Apply at plant, in furrow only. For use only as an herbicide safener.

Do not plant root crops in treated fields within 12 months of application.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking or material is spilled for any reason or cause, carefully sweep material into a pile. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Dispose of pesticide as directed above. In spill or leakage incidents, keep unauthorized people away.

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 DISPOSAL: Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT NOTICE—Seller warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions and instructions specified on the label under normal conditions of use, but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, expressed or implied, extends to the use of this product, contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

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