

NOV 10 1982

Memorandum

TO: David Severn, Chief
Environmental Fate Branch
Hazard Evaluation Division (TS-769)

THRU: Raymond W. Matheny
Head, Review Section No. 1
Ecological Effects Branch
Hazard Evaluation Division (TS-769)

Henry T. Craven
Registration Standards Coordinator
Ecological Effects Branch
Hazard Evaluation Division (TS-769)

Clayton Bushong, Chief
Ecological Effects Branch
Hazard Evaluation Division (TS-769)

SUBJECT: Aquatic EECs for Terbufos

EEB requests that estimated environmental concentrations (EECs) of Terbufos and its principal degradates in water be calculated for the present maximum use rate of COUNTER[®] 15G on corn (2.4 oz. a.i./1000 linear feet of row) with a band treatment (see attached label information from the EPA Index). According to the 6/4/82 Qualitative Use Assessment prepared by E. David Thomas, Ph.D., rows are spaced from 12-48 inches apart with the individual state averages varying from 35-39 inches. Please report EECs for both a "worst-case" row spacing (e.g., 12 inches) and a "typical" row spacing (e.g., 35-39 inches). To be most useful for EEB, the persistence of estimated aquatic concentrations of parent material and principal degradates should also be provided.

Please use the existing scenario approved for corn (12/16/80) or whatever set of environmental parameters that you believe will enable the best estimate of expected aquatic residues. For incorporation in the Ecological Effects portion of the Terbufos Registration Standard, these EECs should be available by December 3, 1982.

James D. Felkel, Wildlife Biologist
Ecological Effects Branch
Hazard Evaluation Division (TS-769)

1 page w/attachment (7 pages)

CONCURRENCES

SYMBOL	TS 769	TS 769	TS 769	TS 769				
SURNAME	Felkel	Matheny	Craven	Bushong				
DATE	11-9-82	11/8/82	11/10/82	11/11/82				

Counter[®]

15-G

ACCEPTED

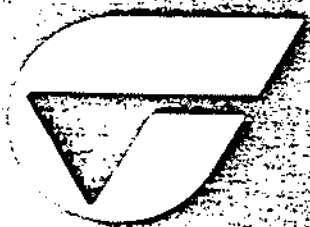
SEP 20 1982

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 241-238



SOIL INSECTICIDE-NEMATOCIDE

OR USE IN FIELD CORN, POPCORN, SWEET CORN, SUGAR BEETS AND GRAIN SORGH

 **CYANAMID**

Active Ingredient:

Terbufos (S-[[[(1,1-dimethylethyl)thio]methyl] 0,0-diethyl phosphorodithioate). 15.0%
Inert Ingredients 85.0%

EPA Reg. No. 241-238

EPA Est. No.



KEEP OUT OF REACH OF CHILDREN

POISON - DANGER



MAY BE FATAL IF SWALLOWED, INHALED OR ABSORBED THROUGH THE SKIN
RAPIDLY ABSORBED THROUGH SKIN
REPEATED INHALATION OR SKIN CONTACT MAY, WITHOUT SYMPTOMS,
PROGRESSIVELY INCREASE SUSCEPTIBILITY TO POISONING

See Back Panel For Antidote And Other Warnings

PELIGRO!
AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada amptiamente.
(ENGLISH TRANSLATION)
DANGER!
(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

Net Weight: 50 lbs.
22.68 kg.

24696-08

D-4

LOT NO.: SEE BAG SEAL

TRADEMARK

SOLD BY

AMERICAN CYANAMID COMPANY

AGRICULTURAL DIVISION—WAYNE, N.J. 07470

MADE AND PRINTED IN U.S.A

Counter[®] 15-G

SOIL INSECTICIDE-NEMATOCIDE

DOT-44D



6

DOT-E 6296

Organic phosphate compound mixture, dry

COUNTER[®] 15-G SOIL INSECTICIDE- NEMATOCIDE

CALIBRATION INFORMATION

FIRST READ THE LABEL

It is important that applicator equipment be properly set to deliver the labeled rate. This chart will help determine the desired rate of application.

When label rate is 8 ounces per 1,000 feet of row, use these suggested starting gauge settings, regardless of row spacing:

APPLICATION	PLANTING SPEED			F mph
	3 mph	5 mph	7 mph	
Casey	18	24	28	28
Flow Noddy (Scholar Field)	8	12	16	16
Flow Noddy (Holland Field)	11	17	21	21
Intersectant (Holland)	17.0	21.5	27.5	27.5
New International (Holland)	19.0	26.0	32.0	32.0
New John Deere (Holland)	13	18	25	25
Intersectant (Holland)	11	15	19	19
Flow Noddy	12.0	21.5	27.5	27.5

NOTE: These settings should be used as starting points only. Occasionally check the amount of COUNTER 15-G used against a known length of row or acreage and make further adjustments accordingly. Also, check calibration occasionally to make sure equipment wear, changing moisture conditions, etc., have not caused a change in flow rate.

Use Rates as Pounds per Acre*
(based on various row spacings and application rates)

Application Rates (Oz./1,000 Ft. of Row)

	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	14 oz.	16 oz.
40"		4.9	6.5	8.2	9.9	11.4	13.1
36"		5.2	6.9	8.6	10.3	12.0	13.7
34"		5.4	7.1	8.9	10.7	12.4	14.1
32"		5.6	7.4	9.2	11.0	12.7	14.4
30"		5.8	7.6	9.4	11.2	12.9	14.6
28"		6.0	7.8	9.6	11.4	13.1	14.8
26"		6.2	8.0	9.8	11.6	13.3	15.0
24"	5.4	8.2	10.9	13.6	16.3	19.0	21.8
22"	5.9	8.9	11.9	14.9	17.9	21.0	24.0
20"	6.5	9.0	13.1	16.3	19.6	22.8	26.1

*See directions for specific use rates on each crop.

Counter[®] 15-G

DANGER!

HAZARDS TO HUMANS and Domestic Animals

Do Not Get In Eyes, On Skin, On Clothing

Wear freshly laundered, long-sleeved work clothing daily. While transferring from package to equipment, wear a clean cap and gloves (rubber or cotton). If cotton gloves are used, they must be laundered or discarded after each day's use. Rubber gloves should be washed with soap and water after each use. Do not wear the same gloves for other work. Destroy and replace gloves frequently.

In case of contact, immediately remove contaminated clothing and wash skin thoroughly with soap and water. Launder clothing and decontaminate shoes before reuse. Wash thoroughly with soap and water before eating or smoking. Bathe at the end of the work day and change clothing.

Do Not Breathe Dust

While emptying bags into equipment, pour downwind and allow as little free fall as possible. Do not pour at face level and do not allow dust to reach the breathing zone.

Do Not Contaminate Food or Feed Products

Once a bag has been opened, use it completely. Make sure the hoppers are emptied while still in the field. Refer to STORAGE AND DISPOSAL statement for further instructions.

Keep All Unprotected Persons Out of Operating Areas.

Keep Out of Reach of Domestic Animals

Not For Use or Storage in or Around the Home

ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds and other wildlife. Treated granules exposed on soil surface may be hazardous to birds and other wildlife. Keep out of any body of water. Do not apply where runoff is likely to occur. Do not contaminate water by cleaning of equipment or disposal of wastes.

IN CASE OF AN EMERGENCY ENDANGERING LIFE OR PROPERTY INVOLVING THIS PRODUCT, CALL COLLECT, DAY OR NIGHT, AREA CODE 201-835-3100.

Antidote: Atropine is an antidote.



POISON



CALL A PHYSICIAN AT ONCE IN ALL CASES OF SUSPECTED POISONING

FIRST AID

If swallowed, drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen.

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes and remove contaminated clothing and shoes. Wash clothing and decontaminate shoes before reuse.

NOTE TO PHYSICIANS. Warning symptoms include weakness, headache, tightness in chest, blurred vision, nonreactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhea and abdominal cramps. Give atropine intramuscularly or intravenously. Depending on severity of poisoning, 2 to 4 milligrams (3 to 6 tablets, 1 100 grain each) every 10 minutes until fully atropinized as shown by dilated pupils, dry flushed skin and tachycardia. Twenty to thirty milligrams, or more, may be required during the first 24 hours. Never give opiates or phenothiazine tranquilizers. Clear chest by postural drainage. Artificial respiration or oxygen administration may be necessary. Observe patient continuously for at least 48 hours. Allow no further exposure to any cholinesterase inhibitor until cholinesterase regeneration has taken place as determined by blood tests.

Pralidoxime chloride (2-PAM; PROTOPAN chloride) may be effective as an adjunct to atropine. Use according to label directions.

DISCLAIMER

The label instructions for the use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the use or application of the product contrary to label instructions, all of which are beyond the control of American Cyanamid Company. All such risks shall be assumed by the user.

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use, subject to the risks referred to above.

Any damages arising from a breach of this warranty shall be limited to direct damages and shall not include consequential commercial damages such as loss of profits or values or any other special or indirect damages.

American Cyanamid Company makes no other express or implied warranty, including any other express or implied warranty of FITNESS or of MERCHANTABILITY.

DIRECTIONS FOR USE

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

BEFORE USING, READ PRECAUTIONARY STATEMENTS.

COUNTER 15-G should be applied with a granular pesticide applicator properly calibrated to assure accurate placement and proper dosage. Cover granules that may be exposed on the ends of the treated rows and turns and loading areas by deep discing immediately after treating fields.

Crop	Pests Controlled	Rates COUNTER 15-G	Application	Remarks
FIELD CORN, POPCORN, AND SWEET CORN At Planting	Corn rootworms Seedcorn maggots	BANDED OR IN-FURROW 6 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	BANDED Place granules in a 7-inch band directly behind the planter shoe in front of the press wheel. IN-FURROW Place granules directly in the seed furrow behind the planter shoe.	For corn rootworms use either the Banded or In-furrow application. For seedcorn maggots use only the In-furrow application.
	Wireworms Symphyla Garden Caneadoles, control through 30 days Nematodes: Lesion, Sorrel, Stunt, Sang, Slubby root, Dagger Maize bibrugs Southern corn bibrugs Corn flea beetles	BANDED OR IN-FURROW BANDED 8-16 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing). IN-FURROW 8 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	BANDED Place granules in a 7-inch band directly behind the planter shoe in front of the press wheel. IN-FURROW Place granules directly in the seed furrow behind the planter shoe.	
	Reduction of white grubs	BANDED 16 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	BANDED Place granules in a 7-inch band directly behind the planter shoe in front of the press wheel.	
	Corn rootworms	6 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	Apply granules to base of plants or over the top of plants just ahead of cultivation shovels so as to cover granules with soil.	Cultivation treatment may be added in addition to treatment at planting.
At Cultivation (Same as crops above)	Maize bibrugs Southern corn bibrugs	BANDED 12-16 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	Apply in a 7-inch band over the row of seedling corn plants and lightly incorporate into the soil when bibrugs or damage are observed, usually in the 1-4 leaf stage of growth. Use cultivators or other suitable implement to lightly incorporate granules into soil.	Do not graze or cut for forage within 30 days of treatment. Only one postemergence incorporation or one cultivation time treatment may be used in addition to treatment at planting time. Consult your state extension service, state extension service, or certified pest management specialist for proper rate and timing of application.
SUGAR BEETS At Planting or Post-emergence	Sugar beet root maggots	4.5 to 6.0 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	Apply in a 5 to 7-inch band over the row and lightly incorporate into the soil.	At Planting Do not place granules in direct contact with the seed. Power incorporation may be used. Do not incorporate deeper than 2 inches. Postemergence Apply at the time of first fly emergence. Lightly incorporate into the soil. Only one application per year may be used.
GRAIN SORGHUM At Bedding	Greenbugs	KNIFED-IN 6-16 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing) or no more than 26 lbs. per acre	KNIFED-IN Put granules 1-4 inches directly below the seed OR 1-4 inches below the seed and up to 5 inches to the side of the seed.	Do not place granules in direct contact with seed as crop injury may occur.
GRAIN SORGHUM At Planting	Greenbugs	KNIFED-IN OR BANDED KNIFED-IN 8-16 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing) or no more than 26 lbs. per acre. BANDED 8-16 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	KNIFED-IN Put granules 1-4 inches directly below the seed OR 1-4 inches below the seed and up to 5 inches to the side of the seed. BANDED Place granules in a 5-7 inch band directly behind the planter shoe in front of the press wheel.	Do not use banded applications in New Mexico, West Texas and the Panhandle of Oklahoma. Only one application per year may be used.

STORAGE AND DISPOSAL

Storage

Store pesticide products in a secure locked area where children, unauthorized persons and animals cannot enter. Do not store in the same area with food or feed. Do not store opened bags.

Prohibitions

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Pesticide Disposal

Pesticide or soilage that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures under the Resource Conservation and Recovery Act.

Container Disposal

Completely empty bag by shaking and tapping sides and bottom to loosen any clinging material. Empty the residues into the application equipment. Dispose of bags in a sanitary landfill, or by other approved State and local procedures.

General

Consult Federal, state or local disposal authorities for approved alternative procedures such as limited open burning.

COUNTER 15-G

SOIL INSECTICIDE-NEMATOCIDE

Supplemental Labeling

FOR USE IN FIELD CORN, POPCORN, AND SWEET CORN

EPA Reg. No. 241-238

OBSERVE ALL PRECAUTIONARY STATEMENTS
IN THE LABEL BEFORE USING

DIRECTIONS FOR USE

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BEFORE USING, READ PRECAUTIONARY STATEMENTS.

COUNTER 15-G should be applied with a granular pesticide applicator properly calibrated to assure accurate placement and proper dosage. Cover granules that may be exposed on the ends of the treated rows and turns and loading areas by deep discing immediately after treating fields.

ACCEPTED
DEC 14 1982
EPA Reg. No. 241-238

Crops	Pests Controlled	Rates Counter 15-G	Application	Remarks
FIELD CORN, POPCORN, AND SWEET CORN At Planting	White grubs	Banded or In-Furrow Banded 8-16 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing). In-Furrow 8 oz. per 1,000 ft. of row for any row spacing (minimum 20-inch row spacing).	Banded Place granules in a 7-inch band directly behind the planter shoe in front of the press wheel. In-Furrow Place granules directly in the seed furrow behind the planter shoe.	