

US EPA ARCHIVE DOCUMENT

Date Out: EFB: DEC 2 1981

**FILE COPY**

To: Product Manager 12 Ellenberger  
TS-767

From: Dr. Willa Garner III  
Chief, Review Section No. 1  
Environmental Fate Branch

Attached please find the environmental fate review of:

Reg./File No.: 464-448, 464-523

Chemical: Chlorpyrifos

Type Product: Insecticide

Product Name: Lorsban

Company Name: Dow

Submission Purpose: Add soybeans to label

ZBB Code: 3(c)(7)

ACTION CODE: 335

Date in: 10/19/81

EFB # 16, 17

Date Completed: DEC 2 1981

TAIS (level II)

Days

Deferrals To:

63

1

           Ecological Effects Branch

           Residue Chemistry Branch

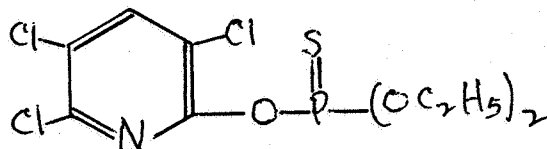
           Toxicology Branch

1.0 Introduction

Chemical Name and Type Pesticide: chlorpyrifos, O,O-diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate, 40.7% ai, Insecticide.

Trade Name: LORSBAN 4E, LORSBAN 15G

Chemical Structure:



The registrant requests the addition of soybeans to the LORSBAN 4E label. This formulation is currently registered for use on certain field, fruit, nut, and vegetable crops.

2.0 Directions for Use

See attached pages

3.0 Discussion of Data

No new environmental fate data submitted

4.0 Recommendation

EFB concurs with the proposed addition of soybeans to the LORSBAN 4E and 15G labels, since no significant incremental risk should be associated with this use.

*Herbert L. Manning*  
Herbert L. Manning, Ph.D.  
Review Section #1  
EFB/HED

LORSBAN 15G  
Proposed Labeling  
Revised October 14, 1980



LORSBAN\* 15G  
GRANULAR INSECTICIDE

For Control of Certain Insects Infesting  
Field Corn, Soybeans, Sugar Beets, and Sweet Potatoes

CAUTION: KEEP OUT OF REACH OF CHILDREN  
Read Complete Precautions on Side Panel } In proper  
type size

ACTIVE INGREDIENT:

Chlorpyrifos [O,O-diethyl O-(3,5,6-trichloro-  
2-pyridyl) phosphorothioate] . . . . . 15.0%

INERT INGREDIENTS: . . . . . 85.0%

EPA Registration No. 464-523

EPA Est. 464-MI-1

In case of an emergency endangering life or property involving this product, call collect <b>517-636-4400</b>	<b>AGRICULTURAL CHEMICAL</b> Do Not Ship or Store with Food, Feeds, Drugs or Clothing
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PRECAUCION AL USUARIO: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.  
TRANSLATION: (TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

DIRECTIONS FOR USE

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

LORSBAN 15G  
 Proposed Labeling  
 Revised October 14, 1980

Field Corn: To control larvae of northern and western corn rootworms apply LORSBAN 15G granular insecticide at planting time as a band (row) treatment at the rate of 6 to 8 ounces per 1,000 feet of row. Equivalent rates of LORSBAN 15G per acre for various row spacing are given in the accompanying table. Incorporate the granules into the top 1 inch of soil by placing in a 6 to 7 inch wide band over the row behind the planter shoe and ahead of the press wheels. *Do not make more than one application per season.*

Amount of LORSBAN 15G Per 1000 Feet of Row	Pounds of LORSBAN 15G Required Per Acre for Various Row Spacing					
	40"	38"	36"	34"	32"	30"
6 ounces	5.0	5.25	5.5	5.75	6.0	6.5
8 ounces	6.5	7.0	7.25	7.75	8.25	8.75

NOTE (Cutworm Control): Use of LORSBAN 15G at the rate of 8 ounces per 1000 feet of row also will control moderate to low infestations of cutworms. In cases of severe infestation, however, enough cutworms outside the treated band may survive to cause crop damage. If this situation occurs, it may be necessary to apply a rescue treatment to control the surviving worms. Consult your State Agricultural Experiment Station or Extension Service specialist for further information concerning insecticides registered for this purpose.

Soybeans: Use LORSBAN 15G to control larvae of the lesser cornstalk borer by application at planting time or postemergence as a band (row) treatment at the rate of 8 ounces per 1,000 feet of row. Equivalent rates of LORSBAN 15G per acre for various row spacings are given in the accompanying table. When used at planting, incorporate the granules into the top 1 inch of soil by placing in a 6 to 7

inch wide band over the row behind the planter shoe and ahead of the press wheels. For postemergent treatment incorporate the granules in a 6 to 7 inch wide band to a depth of 1/2 inch to 1 inch using a suitable cultivator. Apply LORSBAN 15G with equipment that will provide uniform distribution of the granules. *Do not make more than one application per season. Do not feed treated soybean forage or hay to meat or dairy animals.*

Sugar Beets: Use LORSBAN 15G to control larvae of the sugarbeet root maggot by application as a row treatment at planting time or postemergence (up to the 2 to 4 true leaf stage of the plant). Apply the granules at the rate of 6.5 to 9 ounces per 1,000 feet of row (equivalent to 10 to 13.5 pounds per acre based on a 22 inch row spacing) by placing in a 5 to 7 inch wide band over the drill row (at planting) or plants (postemergence). When used at planting, the granules may be applied either ahead of the planter shoe and the seed drilled in the center of the band or behind the planter over the drill row. Incorporate the granules to a depth of 1 to 2 inches with either method. For postemergent treatment incorporate the banded granules to a depth of 1/2 inch to 1 inch using a suitable cultivator. Apply LORSBAN 15G with equipment that will provide uniform distribution of the granules. *Do not make more than one application per year.*

Sweet Potatoes: Use LORSBAN 15G as an aid to reduction of feeding damage by larvae of *Conoderus* wireworms, *Systema* flea beetles and sweetpotato flea beetle by preplant, broadcast application at the rate of 13.5 pounds per acre, using equipment that will evenly distribute the granules over the treated area. After application, incorporate the granules into the soil to a depth of 4 to 6 inches using a rotary hoe, disc cultivator, or other suitable incorporation equipment. Plant the crop in the usual manner as soon as possible after treatment. *Do not make more than one application per season.*

LORSBAN 4E  
Proposed Labeling  
Revised October 14, 1980



**LORSBAN\* 4E**  
**INSECTICIDE**

*For Control of Various Insects Infesting Certain  
Field, Fruit, Nut, and Vegetable Crops*

**Complete Directions for Use, Use Precautions and Restrictions,  
Hazards and Other Important Information  
For the Proper Use, Handling, Storage and Disposal of this Product**

**D479**

\* Trademark of THE DOW CHEMICAL COMPANY

EPA Reg. No. 499-448  
EPA Est. No. 499-10-1

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Soybeans →

**READ ENTIRE LABEL  
BEFORE USING THIS PRODUCT**

**PRECAUCION AL USUARIO:** Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

**TRANSLATION: (TO THE USER:** If you cannot read English, do not use this product until the label has been fully explained to you.)

In case of an emergency endangering life or property involving this product, call collect 517-836-4400.

**ACTIVE INGREDIENTS:**

Chlorpyrifos (O,O-diethyl O-(3,5,6-trichloro-2-pyridyl) phosphorothioate) ..... 40.7%  
Aromatic petroleum derivative solvent ..... 22.8%

**INERT INGREDIENTS:** ..... 36.5%

Contains 4 pounds of chlorpyrifos per gallon





**SOYBEANS:** Use LORSBAN 4E for control of the following pests at the dosages indicated:

Lesser cornstalk borer . . . 4 pints  
per acre  
(at planting or postemergence in a 6 to 10 inch wide band followed by light incorporation);

. . . 2 pints  
per acre  
(at cracking in a 6 to 10 inch wide band followed by a second spray 5 days after the initial treatment);

Cutworms, European corn borer, corn earworm, southern green stink bug. . . . . . 2 pints  
per acre

Bean leaf beetle . . . . . 1 to 2 pints  
per acre

Mexican bean beetle, armyworms. . . . . . 1 to 1 1/2 pints  
per acre

Velvetbean caterpillar, green cloverworm . . . . . 1/2 to 1 pint  
per acre

(as a broadcast, foliar spray using ground or aerial equipment when field counts indicate damaging insect populations are developing or present; re-treat as necessary to maintain control).

Mix the required dosage in enough water to ensure thorough coverage.

**Restrictions:** Do not apply more than 10 pints of LORSBAN 4E per acre or 5 pounds of chlorpyrifos (active ingredient) per acre per season. Do not apply within 28 days before harvest. Do not feed treated soybean forage or hay to meat or dairy animals.

**Restrictions:** Make only one application during the dormant season. Do not allow meat or dairy animals to graze in treated orchards.

**SWEET POTATOES:** Use LORSBAN 4E to control *Conoderus* wireworms, *Systema* flea beetles, and the sweet potato flea beetle by preplant application at the rate of 4 pints per acre as a broadcast (overall) spray to the soil surface followed by incorporation. Mix the specified dosage with enough water to obtain uniform coverage of the treated area and apply as a coarse spray using suitable ground spray equipment. After application, incorporate the insecticide into the soil to a depth of 4 to 8 inches using a rotary hoe, disc cultivator, or other suitable incorporation equipment. Plant the crop in the usual manner as soon as possible after treatment.

**Restrictions:** Do not make more than one application per season.



**STORAGE AND DISPOSAL**

**Storage:** Keep away from food, feedstuffs, and domestic water supplies. Handle concentrate in a ventilated area. Keep container closed.

**Disposal:** Do not reuse empty container for any purpose. Promptly crush or perforate and bury with wastes in a location away from water supplies. Follow official local pesticide container disposal regulations where applicable.

**ATTENTION:**

Do Not Cut or Weld Container

**NOTICE:** Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express 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.