

Sh. Whnessy No.: 059101

Date out of EAB: 17 APR 1984

To: J. Ellenberger
Product Manager 12
Registration Division (TS-767)

From: Samuel M. Creeger, Chief
Environmental Chemistry Review Section 1
Exposure Assessment Branch
Hazard Evaluation Division (TS-769c)

COPY

Attached, please find the EAB review of:

Reg./File No.: 464-448

Chemical: Chlorpyrifos

Type Product: Insecticide

Product Name: Lorsban 4E

Company Name: Dow

Submission Purpose: add use on asparagus

ZBB Code: 3(c)(7)

Action Code: 335

Date In: 2/23/84

EAB No.: 4206

Date Completed: 4/17/84

TAIS (Level II) Days

Deferrals To:

64

0.5

Ecological Effects Branch

Residue Chemistry Branch

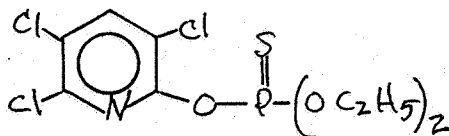
Toxicology Branch

1.0 INTRODUCTION

Chemical Name and Type of Pesticide: chlorpyrifos, O,O-diethyl O-(3,5,6-trichloro-2-pyridyl)phosphorothioate, insecticide.

Trade Name: LORSBAN 4E Insecticide

Chemical Structure:



Dow Chemical is requesting the addition of asparagus to its LORSBAN 4E label.

2.0 DIRECTIONS FOR USE

See attached label.

3.0 DISCUSSION OF DATA

No new data submitted.

4.0 RECOMMENDATION

4.1 The environmental fate data in our files supports the registration amendment to add use on asparagus to the LORSBAN 4E label.

4.2 EAB notes that the soil photolysis data gap still exists. A recent review (2 Feb. 1984) found the submitted studies unacceptable.

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

SPECIMEN LABEL
REDUCED TO 55%



Lorsban 4E insecticide

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

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	
EPA Reg. No. 464-448	EPA Est. 464 MI 1

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.

KEEP OUT OF REACH OF CHILDREN

WARNING

**MAY BE FATAL IF SWALLOWED • MAY BE ABSORBED THROUGH SKIN
MAY BE INJURIOUS TO EYES AND SKIN
SEE BACK PANEL FOR ADDITIONAL PRECAUTIONS**

In case of an emergency endangering life or
property involving this product, call collect
517-636-4400

AGRICULTURAL CHEMICAL
Do Not Ship or Store with Food, Feeds,
Drugs or Clothing

18.93 L / 5 gal

86-1417 PRINTED IN U.S.A. IN MAY, 1983.
REPLACES SPECIMEN LABEL 86-1417 PRINTED IN APRIL, 1983.
DISCARD PREVIOUS SPECIMEN LABELS.
REVISIONS INCLUDE: (1) CONTROL OF BEET ARMYWORMS AND CUTWORMS IN SUGAR BEETS.

THE
MIDLAND
CORAL

ENTIRE LABEL BEFORE USING THIS PRODUCT

ION AL USUARIO: Si usted no lee
o use este producto hasta que
eta le haya sido explicada
ente.

UTION: (TO THE USER: If you can-
English, do not use this product
label has been fully explained to

INGREDIENTS:

pyrifos (O,O-diethyl O-
5-trichloro-2-pyridyl)
phorothioate] 40.7%
tic petroleum derivative
ent 22.8%
GREDIENTS 36.5%
4 pounds of chlorpyrifos per

of an emergency endangering
or property involving this
product, call collect
517-636-4400

CULTURAL CHEMICAL
Ship or Store with Food, Feeds,
Drugs or Clothing

on turf or for structural pest control. Do
ate this product into other end use

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HAZARDS

KEEP OUT OF REACH OF CHILDREN

WARNING

PRECAUTIONARY STATEMENTS

Hazards to Humans and

Domestic Animals

MAY BE FATAL IF SWALLOWED • MAY BE
ABSORBED THROUGH SKIN • MAY BE
INJURIOUS TO EYES AND SKIN

Do Not Take Internally • Do Not Get In
Eyes, on Skin or on Clothing • Avoid
Breathing Vapors and Spray Mist • Wash
Thoroughly After Handling

Statements of Practical Treatment

If Swallowed: Do not induce vomiting. Contains
aromatic petroleum solvent. Call a physician
immediately.

If On Skin: In case of contact, remove contami-
nated clothing and immediately flush skin with
soap and water. Wash contaminated clothing
before reuse.

If In Eyes: Flush eyes with plenty of water for 15
minutes. Call a physician.

NOTE TO PHYSICIAN: Chlorpyrifos is a cholines-
terase inhibitor. Treat symptomatically. Atropine
only by injection is an antidote.

Physical and Chemical Hazards

COMBUSTIBLE

Do Not Use or Store Near Heat or Open
Flame • Do Not Cut or Weld Container

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required dosage with enough water to
orough coverage of crop foliage and
g aerial (fixed-wing or helicopter) or
erated ground spray equipment. For
lication use at least 2 gallons of water
Treat when field counts or crop injury
that damaging pest populations are
g or present; however, do not apply
once per crop cutting.

L4E insecticide should not be tank-mixed
cides, surfactants, or fertilizer formula-
ss prior use has shown the combination
us under your current conditions of use.
otoxic symptoms may be observed on
nder rapidly growing alfalfa when
th LORSBAN 4E. Alfalfa will outgrow the
and no yield loss should be expected.

uct is highly toxic to bees exposed to
tment on alfalfa. Do not apply if nearby
clustered outside of hives and bees are
Protective information may be obtained
Agricultural Extension Service.

ns: Do not cut or graze treated alfalfa
days after application of 1 pint of
4E per acre nor within 21 days after
of rates above 1 pint per acre. Do not
than 4 applications per year.

UTIONS: Use LORSBAN 4E insecticide at
ndicated to control the following pests.
ower rates for light infestations and
he dosage for heavier infestations.

Dosage LORSBAN 4E for	Gallons of Spray Per Acre For Dilute Applications ¹	Remarks	Use directions apply in all states including California.	Use directions apply in all states except California (See footnotes 1 & 2).
Spray Coverage				
(Pints/ al. water)				
Dilute or Concentrate (Pints/Acre)				
1	2 to 7	200 to 700		
1	2 to 7	200 to 700		

ASPARAGUS: Use LORSBAN 4E to control cutworms by
application at the rate of 2 pints per acre. Mix
the specified dosage in sufficient water to ensure
thorough coverage of treated plants and apply as
a broadcast spray using suitable power-operated
ground spray equipment. It is preferable to apply
LORSBAN 4E when the soil is moist and worms are
active on or near the soil surface.

Restrictions: Do not make more than one
application per season or apply within one day
of harvest. Based on available residue data,
the use of LORSBAN 4E on asparagus is limited
to the Mid-west and Pacific Northwest.

¹ In California apply as Thorough Distribution
Coverage (TDC) using ½ to 1 pint of LORSBAN 4E
in 100 gallons of water and 6 to 12 pints LORSBAN
4E per acre in dilute or concentrate sprays. For
dilute sprays, apply 600 to 1200 gallons of spray
per acre.

² In California apply as Thorough Coverage (TC)
using same dosages as in ¹. For dilute sprays
apply 1200 to 2400 gallons of spray per acre but
do not apply more than 12 pints of LORSBAN 4E
per acre.

³ Gallonage per acre based on average size of
mature trees. Adjust to tree size per acre.

For dilute applications, use the specified dosage
in 100 gallons of water for the spray type indicated
for pest to be controlled. For concentrate sprays,
use the same amount of LORSBAN 4E per acre
that would be needed for application as a diluter
spray, using appropriate application / coverage
procedures. Treat when insects become a prob-
lem or in accordance with the local spray sched-
ule recommended by your State Extension Service
Specialist. Do not apply during bloom period o.
when temperature exceeds 95°F. Do not tank mix
LORSBAN 4E with DUTHAN V[®] 50W miticide in low

more than 2 applica-
ore than 15 pints of
er acre per fruit year.
ation within 30 days of
t treat within 21 days
tions up to 7 pints of
r within 35 days for
pints per acre. Do not
involving contact with
eatment. Do not allow
d areas.

VEET CORN: For use to
orms, chinch bugs,
flea beetle larvae and
grubs, western bean
mphyllans and lesser

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