

4/11/83
Shaughnessy No. 59101

Date Out EFB:

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

FILE COPY

From: Emil Regelman, (Acting) Chief
Review Section No. 1
Environmental Fate Branch
Hazard Evaluation Division (TS-769)

Attached please find the environmental fate review of:

Reg./File No: 464-LLE

Chemical: Chlorpyrifos

Type Product: Insecticide

Product Name: LORSEBAN 50W

Company Name: DOW

Submission Purpose: label amendment, new use on almonds and walnuts,
conditional registration, also minor formulation change

ZBB Code: 3(c)(7)

ACTION CODE: 181

Date in: 11/3/82

EFB # 45

Date completed: 1/11/83

Tais (level II)

Days

63

1.00

Deferrals To:

Ecological Effects Branch

Residue Chemistry Branch

Toxicology Branch

1. INTRODUCTION

Dow Chemical Company has submitted a minor formulation change and an application for the conditional registration of chlorpyrifos (LORSBAN 50W) for use on almonds and walnuts. Chlorpyrifos is currently registered for use on certain field, fruit, nut and vegetable crops. An incremental risk assessment is requested.

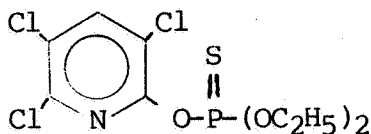
1.1 CHEMICAL

Common Name: Chlorpyrifos

Trade Name: LORSBAN

Chemical Name: O,O-Diethyl O-(3,5,6-Trichloro-2-Pyridyl)
Phosphorothioate

Chemical Structure:



2.0 USE DIRECTIONS

See attached label.

3.0 DISCUSSION OF DATA

No new data were submitted. EFB data requirements for orchard crop uses have been satisfied.

4.0 RECOMMENDATIONS

The environmental fate of chlorpyrifos has been adequately described for conditional registration of the proposed additional use on almonds and walnuts.

Norma Kay Whetzel
January 11, 1983
Review Section No. 1
Environmental Fate Branch
Hazard Evaluation Division

LORSBAN 50W
Proposed Labeling
October 22, 1982

LORSBAN* 50W

Wettable Powder Insecticide

For Control of Various Pests Infesting
Almonds and Walnuts

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

ACTIVE INGREDIENT:

Chlorpyrifos [0,0-diethyl O-(3,5,6-trichloro-2-
pyridyl)phosphorothioate]. 50%

INERT INGREDIENTS: 50%

EPA Registration No. 464-

EPA Est. No. 464-MI-1

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

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.

General Information

LORSBAN 50W insecticide is a wettable powder formulation
designed for use as a cover spray to control various pests

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Restrictions: Make only one dormant/delayed dormant spray application and no more than three foliar spray applications per season. Do not apply within 14 days before harvest. Do not allow livestock to graze in treated orchards.

Walnuts: Use LORSBAN 50W as a foliar or a dormant/delayed dormant treatment to control walnut scale when pests appear or in accordance with local conditions. Apply at the rate of 4 pounds per acre as a dilute, full-coverage spray in a maximum of 400 gallons of water per acre or as a concentrate spray in a minimum of 100 gallons of water per acre using suitable ground application equipment. When concentrate sprays are applied, proper equipment must be used to obtain uniform coverage. If scale infestations are severe, dilute sprays should be used. Use oil as recommended by your State Agricultural Experiment Station or Extension Service Specialist. Do not use oil with LORSBAN 50W during the dormant/delayed dormant period in the central or southern San Joaquin Valley in California or in any area where trees may be subject to stress due to drought, drying winds, disease or severe insect infestations.

Restrictions: Make only one dormant/delayed dormant spray application and no more than two foliar spray applications per season. Do not apply within 14 days before harvest. Do not allow livestock to graze in treated orchards.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING

MAY BE FATAL IF SWALLOWED

CAUSES EYE IRRITATION

Do not take internally. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling and before eating or smoking. Remove and wash

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injurious to almonds and walnuts. LORSBAN 50W is compatible with insecticides, miticides, and fungicides commonly recommended in orchard spray schedules except for alkaline materials such as Bordeaux mixture and lime.

Mixing Instructions

LORSBAN 50W mixes readily with water to form a suspension. Mix the required amount of LORSBAN 50W with a small quantity of water and add this premix while filling the spray tank. Alternatively, fill the tank with the required amount of water and then add the premix. Maintain sufficient agitation during both mixing and application to ensure uniformity of the spray mixture. LORSBAN 50W contains a wetting agent. Do not use additional wetting agents, spreaders or stickers.

Use and Dosage Recommendations

Almonds: Use LORSBAN 50W as a foliar or a dormant/delayed dormant treatment to control peach twig borer and San Jose scale when pests appear or in accordance with local conditions. Apply foliar sprays at the rate of 4 pounds per acre as a dilute, full-coverage spray in a maximum of 400 gallons of water per acre or as a concentrate spray in a minimum of 40 gallons of water per acre using suitable ground application equipment. Apply dormant/delayed dormant sprays at the rate of 1/2 to 1 pound per 100 gallons of water by application to runoff using suitable ground equipment. When concentrate sprays are applied, proper equipment must be used to obtain uniform coverage. If scale infestations are severe, dormant/delayed dormant sprays at the higher dosage should be used. Use oil as recommended by your State Agricultural Experiment Station or Extension Service Specialist.

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contaminated clothing before reuse. In case of contact, immediately flush eyes with plenty of water and get prompt medical attention if irritation develops or persists. Wash contaminated skin with soap and plenty of water.

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

Environmental Hazards

This product is highly toxic to bees exposed to direct treatment or residues on crops. Avoid use when bees are actively foraging. Protective information may be obtained from your Cooperative Agricultural Extension Service.

LORSBAN 50W insecticide is toxic to fish, birds and other wildlife. Fish and crustaceans may be killed if their waters are contaminated with this product. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes. Use this product only as specified on this label.

STORAGE AND DISPOSAL

Prohibitions: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

Pesticide Disposal: Pesticide or suspension that cannot be used should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

Container Disposal: Dispose of in an incinerator or landfill approved for pesticide containers or bury in a safe place.

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

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.

U.S. Patent No. 3,244,586

Pounds _____ Lot _____

THE DOW CHEMICAL COMPANY

AND SUBSIDIARIES

MIDLAND, MICHIGAN 48640, USA Horgen, SWITZERLAND HONG KONG
CORAL GABLES, FLORIDA 33134, USA SARNIA, ONTARIO, CANADA

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