

B15-818
TAR-1723

Dr. Schmidt

ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

001723

Date: March 28, 1973

Reply to
Attn of:

Subject: Primor[®] 50 WP - New Chemical Insecticide for use on ornamentals.

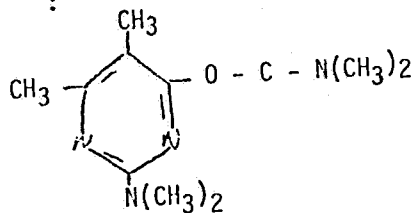
To: Mr. Lee E. TerBush, Acting Chief
Coordination Branch
Registration Division

Registration No. : 10182-T

Registrant : ICI America Inc.
Concord Pike & New Murphy Rd.
Wilmington, Del. 19899a

Use Pattern : To be sprayed on foliage of ornamentals
at the rate of 4 to 8 oz/100 gallon to
control aphids. Application is as soon
as aphid populations appear, preferably
before the open bloom stage and not more
than 4 times of any one month.

Chemical Structure :



2-dimethylamino-5,6 dimethyl-4-pyrimidinyl
dimethylcarbamate (Pirimicarb)

Formulation :

Active Ingredient

Pirimicarb----- 50%

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Inert Ingredients

Toxicology:

Studies made with Technical Grade Material

Acute:

| | | | |
|-----------------|----------------|------|---------------|
| Oral | Rat (female) | LD50 | 147 mg/kg |
| Oral | Mouse (female) | LD50 | 107 mg/kg |
| Oral | Dog | LD50 | 100-200 mg/kg |
| Intraperitoneal | Rat | LD50 | 25 mg/K |

Oral Rats (following storage of material at 37°C)

| | | |
|--------------------|------|-----------|
| 0 storage time | LD50 | 168 mg/kg |
| 3 mos storage time | LD50 | 165 mg/kg |
| 6 mos storage time | LD50 | 221 mg/kg |

Skin Irritation Rabbit - not irritating with 25% soln.

Eye Irritation Rabbit - not irritating with 1 drop 50 mg/ml.

Dermal Rats - LD50 > 500 mg/kg

Neurotoxicity Hens - 25 mg/kg caused no neurotoxic symptoms.

Oral Rats - 10 day study - 50 mg/kg showed no toxic signs but had slowed growth rate and slight depression.

Dermal Rabbits - 14 days - 500 mg/kg no toxic signs

Subacute:

Inhalation Rats - 3 wks actual exposure gave an LC50 of 300 mg/m³ ± 500 mg/kg total. This study did not include a ChE determination.

Inhalation Rats - 3 wks saturated vapour (0.4 mg/m³ ± 0.04 ppm) at room temperature revealed no toxic effects and produced no significant plasma or RBC ChE depression. A man working 8 hours in the saturated

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INERT INGREDIENT INFORMATION IS NOT INCLUDED

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vapour (0.4 mg/m^3) would only inhale approximately 4 mg pirimicarb or $60 \mu\text{g/kg}$.

→ Studies made with 50% W.P. Formulation

Acute:

Oral Rats (female) - LD_{50} 356 mg/kg

Skin Irritation Rabbit - 50% paste mildly irritating (Draize)

Eye Irritation Rabbit - 0.1 ml of 100 mg/ml was slightly irritating (Draize)

Inhalation Rats - 20 g/m^3 no toxic symptoms with 40% plasma ChE depression and not significant RBC-ChE depression*.

* ChE depression of RBC was observed in the acute oral studies. Rats receiving the acute oral dose showed toxic signs of salivation, chromolachrymation, urination, defecation, miosis and muscular fibrillations leading to fasciculations. Blood taken from the animals just before death showed 67% inhibition of plasma ChE and 92% inhibition of RBC-ChE.

Conclusions:

Pirimor 50 WP is considered to be an aphicide to be used exclusively on ornamentals. Therefore, its use would not include any edible products. The data presented with this request for registration substantiates the safety of the material when used in accordance with the label. TB recommends, pending requirements of other Branches, that Pirimor 50 WP be registered for use as described on the label.

Robert P. Schmidt 3/29/73

Robert P. Schmidt, D.V.M.
Toxicology Branch
Registration Division

cc: EEB
DB
IRB
HFB
Div. Reading File
Branch Reading File
PCCritchlow
GEWhitmore

RPSchmidt:dtb 3/28/73

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