US EPA ARCHIVE DOCUMENT

9/13/79
~~RCB~~
~~Hummel~~
Reviewer P. Dav
PP 9G2204
4GC

September 13, 1979

E.P.A. Registration #: 7969-EUP-13
Ronilan; PP# 9G2204; Request for Temporary Tolerances of 10 ppm in or on Lettuce; 25 ppm in or on Peaches and Apricots; 5 ppm in or on Cherries; 2.5 ppm in or on Nectaries; and 1.0 ppm in or on Plums for Residues of the Fungicide,
3-(3,5-Dichlorophenyl)-5-Ethyl-5-Methyl-2,4-Oxazolidinedione and its Dichloroaniline - Containing Metabolites.

Caswell #: 323C
Accession #: 098251, 098250

Petitioner: BASF Wyandotte Corp.
100 Cherry Hill Rd.
P.O. Box 181
Parsipany, N.J. 07054

FROM: William Dykstra
Toxicology Branch/HED (TS-769) WMD 9/17/79 WSW

TO: 1. Henry Jacoby (21)
RD, TS-767

2. RCB, TS-769

Recommendations:

1. The correct signal word for Ronilan is Warning on the basis of the previous and submitted eye irritation studies. Adequate precautionary labeling for the Warning signal word should be added to the EUP label.

2. The current toxicity data base can support the EUP and temporary tolerances.

EUP program: A total of 4,050 lbs. of Ronilan distributed to 11 different states is proposed for the lettuce part of this EUP program. A total of 14,616 lbs distributed in 25 states is proposed in the stone fruit program. This EUP, therefore, involves a grand total of 18,666 pounds of product for use in 29 states:

DATE: February, 1980 - February, 1981

Product Name: Ronilan

Ingredient	Percent Weight
Vinclozolin	50.00
Inerts	50.00
	100.00

Inerts cleared under 40 CFR 180.1001

No
Method D1

Review:

A memo of 4/17/78 from R. Gessert in PP# 8G2068:

1. Studies conducted with Formulation

0 Rat acute oral LD_{50} >16,000 mg/kg (both sexes)
0 Rabbit acute dermal LD_{50} > 2000 mg/kg (both sexes)
0 Rat acute inhalation LC_{50} > 1.7 mg/L for 4 hours
0 Rabbit primary skin irritation: P.I. = 2.75
0 Rabbit primary eye irritation (1st study); Score of 19.7; some corneal opacity and conjunctivitis; no iritis; Tox Category II: WARNING
0 Rabbit primary eye irritation (newly submitted) Score of 3.0; no corneal opacity but irritation persisted up to day 8 in 2/6 rabbits; Tox CATEGORY II: WARNING

2. Studies Conducted with Technical

0 Rat acute oral LD_{50} > 10,000 mg/kg (both sexes)
0 Rat acute dermal LD_{50} 2500 mg/kg (both sexes)
0 90 day rat feeding study: NOEL = 450 ppm (highest dose)
0 90 day dog feeding study: NOEL = 300 ppm
0 Mouse teratology: negative at 600 ppm
0 3-Generation rat reproduction: NOEL = 1458 ppm (highest dose)
0 Dominant lethal assay in mice: negative at 2000 mg/kg for five days
0 Chronic feeding/oncogenic in rats for 130 weeks: oncogenic potential: negative; NOEL = 486 ppm

0 Chronic feeding/oncogenic in mice for 26 months: oncogenic potential: negative; NOEL = 1458 ppm

0 Metabolism: repeated oral dosing in rats

B. No permanent tolerances have been established.

C. Evaluation of the provisional ADI (PADI)
An examination of the studies conducted with the technical material shows the dog to be the most sensitive species for which toxicity data are available.

STUDY	NOEL (ppm)	mg/kg/day
90 Day Dog	300	7.5
90 Day Rat	450	45.0
Chronic Rat	486	24.3
Chronic Mouse	1458	218.7

Therefore the 90 day dog study with a NOEL of 7.5 mg/kg/day will be used to calculate the provisional ADI. A 2000 fold safety factor is used to calculate the PADI.

$$PADI = NOEL \times \frac{1}{2000}$$

$$PADI = 7.5 \text{ mg/kg/day} \times \frac{1}{2000} = 0.0038 \text{ mg/kg/day}$$

The provisional MPI (PMPI) is .2250 mg/day for a 60 kg person.

Conclusions and Recommendations

The oncogenic potential of the pesticide in two species is negative. The adverse reproductive potential is negative and the teratogenic potential in one species is negative. However, in as much as the dog is the most sensitive species for the pesticide, the chronic toxicity potential for the pesticide has not been fully explored. An extended subchronic (6 months) dog feeding study is required. The PADI is > 260.63% based on the 90 day dog study and a 2000-fold safety factor. Since the EUP and temporary tolerances are for one year, the current toxicity data base can support the action.

Attachment

ssr
RB

e last updated 9/12/79

ACCEPTABLE DAILY INTAKE DATA

Dog NOEL mg/kg	Dog NOEL ppm	S.F.	PADI mg/kg/day	MPI mg/day/60kg
7.500	300.00	2000	0.0038	0.2250

Current Action 9G2204

CROP	Tolerance	Food Factor	mg/day/1.5kg
Apricots(3)	25.000	0.11	0.04216
Peaches(114)	25.000	0.90	0.33725
Lettuce(84)	10.000	1.31	0.19622
Cherries(30)	5.000	0.10	0.00766
Nectarines(100)	2.500	0.03	0.00113
Plums,inc prunes(125)	1.000	0.13	0.00199

MPI	TMRC	% ADI
0.2250 mg/day/60kg	0.5864 mg/day/1.5kg	260.63

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