12-15-86
RCB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEC 15 1986

Office of Pesticides
and Toxic Substances

MEMORANDUM

SUBJECT: IR-4 Proposal to establish tolerances for Iprodione and its isomer and metabolite(s) in or on carrots

TO: Hoyt Jamerson, PM 43
Emergency Response and Minor Use Section
Registration Support and Emergency Response Branch
Registration Division (TS-767)

FROM: Margaret L. Jones M-L-Jones 12/11/86
Review Section III
Toxicology Branch

THROUGH: Marcia Van Gemert, Ph.D., Head M. VanGemert 12.12.86
Review Section III

and Theodore M. Farber, Ph.D., D.A.B.T., Chief
Toxicology Branch

Compound: Iprodione (Rovral, Glycophene) Tox. Chem.: 470A

Record No.: 184709 Tox. Project: 7-0187

Petitioner: Interregional Research Project No. 4

Accession No.: 265922 Petition No.: 7E3474

Action Requested: Establish tolerances for Iprodione and its isomer and metabolite in or on the raw agricultural commodity carrots at 5 ppm.

Data Considered: 1 year dog study
3 generation reproduction in the rat
chronic/oncogenicity in the mouse (3/6/78)
developmental toxicity in the rabbit (12/12/85)

Data Currently Lacking on Iprodione: Data gaps were recently discussed with the PM for this chemical. Action is apparently under way to correct the deficiencies of acute dermal and sensitization and metabolism for the technical chemical; and developmental toxicity in a species other than the rat has apparently been submitted to the Agency (not yet received by Toxicology Branch).

1/4

Actions Under Way to Obtain Missing Data: See above

Published Tolerances for Iprodione: Tolerances exist for Iprodione in or on raw agricultural commodities as published in 40 CFR 180.399, 21 CFR 193.251, and 21 CFR 561.263.

Effect of Proposed Tolerance on Acceptable Daily Intake (ADI): The present request for tolerances of Iprodione in or on carrots at 5 ppm was analyzed in a Toxicology Branch ADI Printoun (copy attached). The acceptable daily intake (ADI) is based on the three generation reproduction study in rats with a no observed effects level of 500 ppm (25 mg/kg/day). The cumulative percent of the ADI used from the existing and proposed actions is 13.7968% for the U.S. population.

Acceptable Daily Intake, Maximum Permissible Intake, and Theoretical Maximum Residue Contribution:

ADI= 0.25 mg/kg/day
MPI= 12 mg/kg/day (60 kg person)
TMRC= 0.034492 mg/kg/day (60 kg BW, 1.5 kg diet)
NOEL= 500 ppm (25 mg/kg/day)
Safety Factor= 100

Comments: Iprodione is currently under consideration by the Toxicology Branch ADI committee and the Agency-wide Rfd Committee which decides on the ADI for pesticide chemicals. The committee is considering changing the study used to set the ADI to the one year dog study which has a NOEL of 100 ppm (2.5 mg/kg/day). It is possible a safety factor of 100 will be chosen for this study, which could result in an ADI of 0.025 mg/kg/day for this chemical.

TOXICOLOGY BRANCH ADI PRINTOUT Date: 12/09/86

Glycophene (Iprodione) ADI = 0.250000 mg/kg/da
Caswell #470A NOEL = 0.0000 mg/kg Safety Factor = 100
CFR No. 180.399 LEL = 0.0000 mg/kg
Status: ADI NOT VERIFIED BY TOX ADI COMMITTEE OR AGENCY RFD COMMITTEE.
WHO last reviewed 1977.

DRAFT

## RESIDUE CONTRIBUTION OF PUBLISHED TOLERANCES

| | CROP | TOLERANCE (PPM) | PETITION NUMBER | FOOD FACTOR | MG/DAY |
|---|---|---|---|---|---|
| 1 | Almonds | 0.050 | | 0.03 | 0.000022500 |
| 54 | Eggs | 0.800 | | 2.77 | 0.033240000 |
| 61 | Garlic | 0.100 | | 0.03 | 0.000045000 |
| 67 | Grapes, not including raisins | 60.000 | | 0.45 | 0.405000000 |
| 84 | Lettuce | 15.000 | | 1.31 | 0.294750000 |
| 90 | Meat, red | 0.400 | | 10.81 | 0.064860000 |
| 93 | Milk and dairy products | 0.300 | | 28.62 | 0.128790000 |
| 128 | Poultry | 2.000 | | 2.94 | 0.088200000 |
| 134 | Raisins | 300.000 | | 0.04 | 0.180000000 |
| 151 | Stone fruits | 20.000 | | 1.25 | 0.375000000 |
| 203 | Kidney | 3.000 | | 0.03 | 0.001350000 |
| 204 | Kiwi fruit | 10.000 | | 0.03 | 0.004500000 |
| 211 | Liver | 3.000 | | 0.03 | 0.001350000 |

TMRC: 0.026285 mg/kg/day (60kg BW, 1.5kg diet)
%ADI: 10.514050

---

## RESIDUE CONTRIBUTION OF TOX-APPROVED TOLERANCES

| | CROP | TOLERANCE (PPM) | PETITION NUMBER | FOOD FACTOR | MG/DAY |
|---|---|---|---|---|---|
| 1 | Almonds | 0.250 | 5F3241 | 0.03 | 0.000112500 |
| 10 | Beans, dry edible | 4.000 | 4F3150 | 0.31 | 0.018600000 |
| 11 | Beans, lima | 2.000 | 4F3150 | 0.19 | 0.005700000 |
| 12 | Beans, snap | 2.000 | 4F3150 | 0.98 | 0.029400000 |
| 17 | Boysenberries | 15.000 | 4F3129 | 0.03 | 0.006750000 |
| 18 | Blueberries | 15.000 | 5E3214 | 0.03 | 0.006750000 |
| 19 | Broccoli | 25.000 | 6F3305 | 0.10 | 0.037500000 |
| 48 | Currants | 15.000 | 5E3214 | 0.03 | 0.006750000 |
| 90 | Meat, red | 0.200 | 4F3129 | 10.81 | 0.032430000 |
| 93 | Milk and dairy products | 0.400 | 4F3129 | 28.62 | 0.171720000 |
| 105 | Onions | 0.500 | 4F3111 | 0.83 | 0.006225000 |
| 115 | Peanuts | 0.100 | 4G3037 | 0.36 | 0.000540000 |
| 115 | Peanuts | 0.400 | 4F3129 | 0.36 | 0.002160000 |
| 127 | Potatoes | 0.500 | 6F3366 | 5.43 | 0.040725000 |

RESIDUE CONTRIBUTION OF TOX-APPROVED TOLERANCES

| CROP | TOLERANCE (PPM) | PETITION NUMBER | FOOD FACTOR | MG/DAY |
|---|---|---|---|---|
| 135 Raspberries | 15.000 | 5E3214 | 0.03 | 0.006750000 |
| 137 Rice | 10.000 | 6F3443 | 0.55 | 0.082500000 |
| 223 Ginseng | 4.000 | 6E3426 | 0.03 | 0.001800000 |

TMRC
0.033892 mg/kg/day (60kg BW, 1.5kg diet)

%ADI
13.556800

---

RESIDUE CONTRIBUTION OF NEW (PENDING) TOLERANCES

| CROP | TOLERANCE (PPM) | PETITION NUMBER | FOOD FACTOR | MG/DAY |
|---|---|---|---|---|
| 24 Carrots | 5.000 | 7E3474 | 0.48 | 0.036000000 |

TMRC
0.034492 mg/kg/day (60kg BW, 1.5kg diet)

%ADI
13.796800

---