

US EPA ARCHIVE DOCUMENT

3-7-96



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 7 1996

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM:

SUBJECT: Iprodione (109801), Reregistration Case No. 2335.
Special Review, Rhône-Poulenc Hydrolysis Data.
No CBRS No., No DP Barcode No.,
MRID 41885401 (previously reviewed).

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Chemistry Branch II - Reregistration Support
Health Effects Division [7509C]

THRU: Andrew R. Rathman, Section Head *R. Rathman*
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Chemistry Branch II - Reregistration Support
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TO: Jack Housenger/Vivian Prunier, PM Team 60
Special Review Branch
Special Review and Reregistration Division [7508W]

and Christina Scheltema
Special Review and Registration Section
Risk Characterization and Analysis Branch
Health Effects Division [7509C]

Registrant Rhône-Poulenc AG Company submitted a summary of data on hydrolysis of iprodione. These data were meant to support the Registrant's claim that the lye peeling process destroys iprodione residues in canned peaches (see CBRS 16838, 2/15/96, J. Abbotts). By facsimile of 3/6/96, the Registrant sent the following material:

- Letter of 12/26/91 from Dan Barolo (then SRRD) to the Registrant, advising that Guideline 161-1, Hydrolysis, was fulfilled.
- Data Evaluation Record (DER) for MRID 41885401, signed by Maria Isabel Rodriguez, EFED, 12/2/91, pp. 1.1 and 1.3.
- Several pages from MRID 41885401, pertaining to hydrolysis.

The data provided were on hydrolysis of ¹⁴C-iprodione, uniformly labeled in the phenyl ring, at pH 5, 7, and 9. The DER notes that in pH 9 solution at 107-121 min post-treatment, iprodione comprised 3.4-5.6% of the applied radioactivity, the compound

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RP-35606 represented 1.4-1.7%, and compound RP-30228 represented 90.7-93.3%.

The structure of RP-35606 was not indicated in the material provided by facsimile, but it does not appear to be a tolerance residue. However, compound RP-30228 is the iprodione isomer, which is a regulated residue (see Figure 1). The presence of this residue after 2 h at pH 9 indicates that it is stable under those conditions.

Conclusions

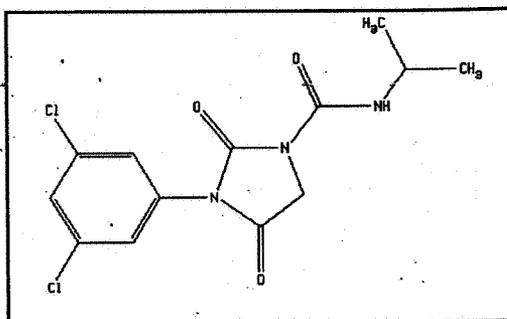
After 2 hours treatment at pH 9, residues of parent iprodione are converted approximately 90% to the isomer RP-30228 (Figure 1), which is also a regulated residue. These data by themselves do not support the Registrant's claim that the lye peeling process destroys iprodione residues of concern in or on peaches.

cc:Circ, Abbotts, RF, Iprodione List B File, SF
RDI:ARRathman:3/7/96:RBPerfetti:3/7/96:EZager:3/7/96
7509C:CBII-RS:JAbbotts:CM-2:Rm805A:305-6230:3/7/96
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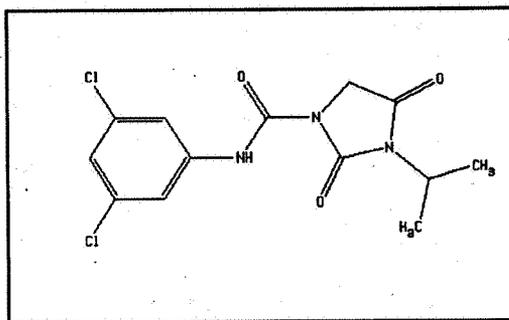
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Figure 1. Iprodione Tolerance Residues:

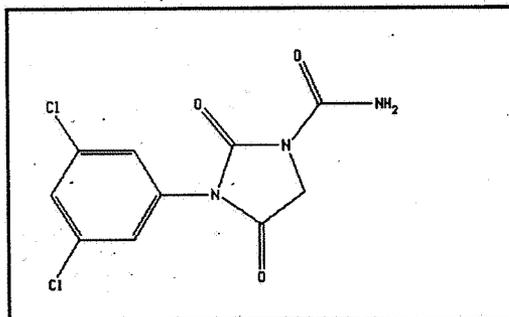
Iprodione parent;
3-(3,5-dichlorophenyl)-
N-(1-methylethyl)-2,4-dioxo-
1-imidazolidine-carboxamide



Iprodione isomer, RP30228;
3-(1-methylethyl)-
N-(3,5-dichlorophenyl)-2,4-dioxo-
1-imidazolidine-carboxamide



Iprodione metabolite RP32490
(animals and plants);
3-(3,5-dichlorophenyl)-2,4-dioxo-
1-imidazolidine-carboxamide



Iprodione metabolite RP36114
(animals); N-(3,5-dichloro-
4-hydroxyphenyl)-ureido-carboxamide

