PMSD ISB

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

JAN 10 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No. 241-233. CYGON(R) 400 (dimethoate) on wheat. Request for an amended registration to reduce the PHI for wheat grain from 60 to 35 days.
MRID No.40650801. DEB No. 4558.

FROM: Linda S. Propst, Chemist
Dietary Exposure Branch
Health Effects Division (TS-769C)

THRU: Andrew R. Rathman, Section Head
Special Registration Section 1
Dietary Exposure Branch
Health Effects Division (TS-769)

TO: William H. Miller, PM #16
Insecticide-Rodenticide Branch
Registration Division (TS-767C)

Agricultural Research Division of American Cyanamid Company is requesting an amended registration for their dimethoate formulation CYGON(R) 400 to reduce the preharvest interval on wheat grain from 60 to 35 days.

Tolerances have been established for total residues of the insecticide dimethoate (O,O-dimethyl S-(N-methylcarbamoylmethyl) phosphorodithioate) including its oxygen analog (O,O-dimethyl S-(N-methylcarbamoylmethyl)phosphorothioate) in or on wheat grain at 0.04(N) ppm and wheat straw at 2 ppm (40 CFR 180.204).

The currently registered use for CYGON(R) 400 on wheat allows for a maximum of 2 applications at rates ranging from 0.25 lbs. a.i. - 0.375 lbs. a.i. per acre. Do not apply within 14 days of grazing immature plants. Do not harvest grain within 60 days of last application.

Residue data submitted with this request were originally submitted August 25, 1975 as an amendment to PP#7G0562. This data reflect residues of dimethoate and dimethoxon on samples of wheat treated with two applications of CYGON(R) 267 at rates of 0.33 - 0.67 lb. a.i./acre. Pre-harvest intervals ranged from 0 to 60 days. All residues (dimethoate + dimethoxon) on wheat grain 35 days after the last application were <0.04 ppm. Data from one study report total residues on wheat straw 35 days

after the second application of CYGON(R) at rates of 0.67 lb. a.i./acre as <0.1 ppm, straw from wheat treated with 2 applications at 0.33 lb. a.i./acre showed residues of 0.61 ppm dimethoate and 0.06 ppm dimethoxon 52 days after receiving the second application. From the data available, Dietary Exposure Branch concludes that total residues of dimethoate and its oxygen analog, dimethoate, occurring on wheat straw as a result of this amended registration will not exceed the established tolerance of 2 ppm.

Conclusions and Recommendations

1. The tolerance established to cover total residues of dimethoate and its oxygen analog, dimethoxon, on wheat grain will not be exceeded as a result of the proposed amended registration.

2. Dietary Exposure Branch concludes that the tolerance established to cover total residues of dimethoate and its oxygen analog, dimethoxon, in or on wheat straw will not be exceeded as a result of the proposed amended registration.

Dietary Exposure Branch has no objections to the proposed amended registration.

cc: Reading File, Circulation, Subject File, Reg. Std. File, Reviewer, Amended Reg. File, PMSD/ISB
RDI: A. R. Rathman, 1/10/89; R. D. Schmitt, 1/10/89
TS-769:DEB:LSP:lsp:CM-2:Rm803C:557-7324:1/10/89

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