



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

MAR 1 1988

MEMORANDUM

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

Subject: RCB and EAB Deferrals on Significant degradates of Harmony

To: V. Walters, PM-25  
Registration Division, TS-767C

From: Marcia van Gemert, Ph.D.  
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*M. van Gemert 2/29/88*

Thru: Theodore M. Farber, Ph.D.  
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Chemical: Harmony

Caswell No: 573S

Firm: DuPont

RCB had originally written a memo (Dec. 24, 1987) outlining the various residues of Harmony found on wheat and treated straw. A number of questions at that time had to be addressed by the Registrant. A subsequent EAB memo dated Feb. 18, 1988 from RCB to Toxicology Branch specifically defers to TB on several issues.

In the wheat straw metabolism studies, the following metabolites were identified. According to RCB these were identified in straw, but RCB is translating the data from straw to grain, because radioactive residues in grain were too low to identify.

Residue	PPM in 2X treated straw	PPM Extrapolated to 1X wheat grain
DPX-M6316 acid	0.033	0.00075
2-Ester-3-sulfonamide	0.006	0.0001
3-Acid-2-sulfonamide	0.059	0.0013
O-demethyl-DPX-M6316	0.004	0.00007
Triazine urea	0.012	0.0002
Triazine amine	0.005	0.00009
O-Demethyl Triazine amine	0.007	0.00012

The contributions that these metabolites make to the total radioactive residue (TRR) were presented by RCB as:

<u>Residue</u>	<u>% TRR</u>
DPX-M6316 acid	4.8-8.9
2-Ester-3-sulfonamide	1.3
3-acid-2-sulfonamide	12.3
O-Demethyl-DPX-M6316	0.9
Triazine urea	0.01
Triazine amine	0.005
O-Demethyl Triazine Amine	0.007

RCB has explained that the total tolerance expression is in terms of the parent compound only, and needs to know from TB whether any of the above metabolites should also be included in the tolerance expression.

TB has examined the structures of these metabolites and toxicology data on the triazine amine moiety, and does not, from the data in hand, feel there is a need to include these metabolites in the tolerance expression.

The January 22, 1988 memo from EAB indicated that triazine amine is a potent leachate with a long half-life (6-8 months). EAB stated that if TB had concerns about triazine amine residues, then additional studies would be required, such as input and output file listings, concentration histories at shallower depths (e.g. 3 and 6 feet) and simulations for 10 years.

EAB also stated that the parent compound will have a very low application rate, only one application/crop/growing season, and degradative mechanisms such as soil metabolism will result in generally very low levels (ppb range in field studies).

Neither the DPX-M6316 acid nor the triazine amine appear to be of toxicological concern. Data have been submitted for triazine amine, and have been reviewed in the February 5, 1988 Toxicology Branch memo. In addition to the Toxicology studies submitted,

[REDACTED] given to animals in the toxicology studies. With the submitted data and triazine levels in samples fed animals in the chronic studies, sufficient data exist on triazine amine to cover these exposures.

INFORMATION WHICH MAY REVEAL A PRODUCT IMPURITY IS NOT INCLUDED