

JUN -4 1986

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BASF Wyandotte Corporation
100 Cherry Hill Road
P.O. Box 181
Parsippany, NJ 07054

Attention: Ms. Melinda M. Schluter

Gentlemen:

Subject: Poast Herbicide (Sunflowers and Peanuts)
EPA Registration No. 7969-58
Pesticide Petition No. 5F3234
Food Additive Petition No. 5H5464
Your Letter Dated February 28, 1985

This refers to Pesticide Petition No. 5F3234 which proposes the establishment of tolerances for the combined residues of the herbicide [1-(ethoxyimino)butyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one and its metabolites containing the 2-cyclohexen-moiety (calculated as the herbicide) in or on the raw agricultural commodities peanuts at 25 parts per million (ppm), peanut hulls at 5 ppm, and sunflower seeds at 7 ppm, Food Additive Petition No. 5H5464, proposing feed additive tolerances for peanut soapstock at 75 ppm and sunflower meal at 20 ppm and their accompanying registration request.

The scientific review and evaluation of the subject petitions have been completed. The following are our conclusions and/or comments.

Residue Chemistry

1. Since the proposed label contains restrictions against feeding treated peanut and sunflower forage or hay to livestock, tolerances will not be required.
2. The nature of the residue in oilseed crops is considered adequately understood. The residues of concern consist of sethoxydim and its metabolites containing the 2-cyclohexen-1-one moiety.

90315:Taylor:T-9:KENCO:5/28/86:6/3/86:MCF:LF

CONCURRENCES								
SYMBOL	TS-767C							
SURNAME	VicWadkins							
DATE	6/4/86							

3. The nature of the residue in ruminants will be considered adequately understood provided reproductions of the TLC chromatograms used to identify metabolites in liver and kidney are submitted. If these do not support the identification of metabolites, further studies may be needed. Refer to previous correspondence concerning PP#3F2904 for details.
4. The nature of the residue in poultry is not well understood. Of edible tissues, characterization was attempted only for liver, resulting in identification of 41 percent of this activity, 43 percent of the fat activity, and 64 percent of the muscle activity. Additional attempts must be made to characterize activity in poultry fat, muscle, and liver. The extracted activity from fat and muscle should be subjected to TLC, and the methanol soluble liver activity should be subjected to hydrolysis to release any polar conjugates. Any released activity should be characterized. The nature of the residue is adequately understood. Refer to previous correspondence concerning PP#3F2904 for details.
5. Adequate analytical methodology is available to enforce the proposed sethoxydim tolerances for plant commodities.
6. No final conclusions concerning the adequacy of the analytical methodology for enforcement of sethoxydim tolerances can be made until questions concerning the nature of the residue in animals have been resolved. Additional analytical methods may be required for animal commodities depending on the additional requested metabolism work.
7. The mode of application for all residue field trial data submitted with PP#3F2950/FAP#3H5413 should be clarified. If the residue data do not reflect aerial application, either additional such data should be submitted or a revised label restriction against aerial application will be required.
8. The proposed sethoxydim tolerance for residues (parent plus metabolites) in/on peanuts, peanut hulls, and sunflower seeds at 25, 5, and 7 ppm, respectively, are adequately supported by the available residue data, pending resolution of conclusion 7.
9. The proposed sethoxydim feed additive tolerances for residues (parent plus metabolites) in peanut soapstock at 75 ppm and sunflower meal at 20 ppm are adequately supported by the available residue data, pending resolution of conclusion 7.

10. Until questions concerning animal metabolism of sethoxydim are resolved, no conclusions concerning the level of secondary residues in meat, fat, milk, poultry, and eggs resulting from the proposed use on peanuts and sunflowers can be made. Additional feeding studies may be needed depending on results of requested studies.

Toxicology

- The available toxicology data support the proposed tolerances.

Further action will await reply to the above comments and completion of review of data submitted supporting PP#3F2904. Final action on the registration request will await establishment of proposed tolerances.

Sincerely yours,

Robert J. Taylor
Product Manager (25)
Fungicide-Herbicide Branch
Registration Division (TS-767C)