6-14-96
PP#4F04407

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

JUN 14 1996

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: HED Metabolism Committee Meeting of 5/20/96. **Sulfentrazone.** PP#4F04407. Chemical# 129081. Barcode D226434. CBTS# 17216.

FROM: G.F. Kramer, Ph.D., Chemist
Tolerance Petition Section III
Chemistry Branch I, Tolerance Support
Health Effects Division (7509C)

THRU: E. Zager, Acting Branch Chief
Chemistry Branch I, Tolerance Support
Health Effects Division (7509C)

TO: HED Metabolism Committee Members[1]

QUESTIONS DISCUSSED

1. Is there any scientific objection to establishing the soybean tolerance in terms of parent plus the metabolite 3-hydroxymethyl sulfentrazone or to establishing the rotational crop tolerances in terms of parent plus the metabolites 3-hydroxymethyl sulfentrazone and 3-desmethyl sulfentrazone? Is it appropriate to base the dietary risk assessment on these residues?

2. Are additional sulfentrazone metabolites at the levels reported of special toxicological concern? If so, which one(s)? Do they warrant inclusion in the tolerance regulation? Separate regulation? Inclusion in the dietary risk assessment? Additional metabolism studies? Toxicological studies?

[1]Richard Loranger, Michael Metzger, Alberto Protzel, Karl Baetcke, William Burnam, Mike Ioannou, Byong-Han Chin, Randy Perfetti

INDIVIDUALS IN ATTENDANCE

METABOLISM COMMITTEE: (Signatures indicate concurrence unless otherwise stated)

Karl Baetcke

Richard Loranger

Michael Metzger

Alberto Protzel

Mike Ioannou

Byong-Han Chin

William Burnam

SCIENTISTS: Non-Committee members responsible for the data presentation (signatures indicate technical accuracy of the report)

G.F. Kramer

S. Makris

METABOLISM COMMITTEE MEMBERS IN ABSENTIA: (Signatures indicate concurrence with the overall conclusions of the Committee.)

Randy Perfetti

MATERIAL REVIEWED

The Committee reviewed the CBTS briefing paper, which included the sulfentrazone metabolic pathways in soybeans, rotational crops and animals (goat and hen) and the magnitude of the residue data. The Committee also reviewed tox data on the metabolism of sulfentrazone in rats.

CONCLUSIONS REACHED

1. For the proposed use on soybeans, there is no scientific objection to establishing the soybean tolerance in terms of parent plus the metabolite 3-hydroxymethyl sulfentrazone and to establishing the

rotational crop tolerances in terms of parent plus the metabolites 3-hydroxymethyl sulfentrazone and 3-desmethyl sulfentrazone. It is appropriate to base the dietary risk assessment on these residues.

2. There are no additional sulfentrazone metabolites at the levels reported which are of special toxicological concern. Although there is a possibility of forming dichloroaniline when scission occurs between the rings, the Committee concluded this is unlikely to be a concern considering the low total radioactivity in grain/seed and the likely oxidation of the carbon atom in the phenyl ring as a result of the scission process.

cc: G. Kramer, R.F., S.F., circ, PP#4F04407, PM 23 (J. Miller), D. McCall (RCAB), Met. Comm. File (R. Loranger)
RDI: E. Zager (5/24/96), R.A. Loranger (5/22/96)
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