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

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OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

CERTIFIED MAIL P060 304 440

Karen R. Blundell
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SUBJECT: Nature of residue in poultry, residue method in plants, and magnitude of residue in soybeans for reregistration of sodium acifluorfen, chemical code 114402

Dear Ms. Blundell:

This letter is in response to your residue chemistry data submissions of June 18 and June 28, 1993 for the reregistration of sodium acifluorfen. We have reviewed these data, MRIDs 428257-01, 428257-02, and 428282-01 and our conclusions are summarized below.

GDLN 171-4(k) Magnitude of the residue in soybeans MRID 428257-01

MRID 428257-01 is acceptable for guideline 171-4(k) pending additional storage stability data. In summary, the combined residues of the sodium salt of acifluorfen and its metabolites (the corresponding acid, methyl ester, and amino analogues) were <0.1 ppm (<0.02 ppm for each metabolite) in/on soybeans treated at the revised maximum seasonal rate (0.5 lb ai/A). The interim storage stability data showed that acifluorfen amine declined to 27% of the initial level after a month and a half. These data can be upgraded by a determination that amine metabolism does not appreciably affect the total combined residue level.

In our meeting of May 17, 1994, you explained that there were certain problems with the recoveries of acifluorfen and its major metabolites and that additional storage stability data were to be determined. Please provide information on the amine recovery problem and your proposed time frame to submit storage stability data with soybeans.

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GDLN 171-4(c) Residue analytical method MRID 428257-02

MRID 428257-02 is acceptable for guideline 171-4(c), however the requirement is not fulfilled until the method is validated by an independent lab. This is required for tolerance enforcement purposes. This validation must be submitted by October 31, 1994.

MRID 428257-02 contained a method (D9205) for the determination of sodium acifluorfen and metabolites in\on soybean seed. The submitted method is adequate for data collection on the combined residues of acifluorfen, its amine metabolites, and their methyl esters in soybean grain.

GDLN 171-4(b) Nature of the residue - livestock MRID 428282-01

MRID 428282-01 is acceptable for guideline 171-4(b). The qualitative nature of the residue is adequately understood. No metabolites were identified which indicate cleavage of the diphenyl ether bond. Acifluorfen, acifluorfen acetamide, and descarboxy acifluorfen have been found to be present in all matrices of poultry. The requirement for the radiovalidation of the enforcement analytical method(s) is reserved until the HED Metabolism Committee determines the residues to be regulated. Additional data are not required at this time.

A copy of our review is enclosed. If you have questions regarding this letter, please call the Chemical Review Manager, Tom Luminello, at (703) 308-8075.

Sincerely yours,

Kathy Davis

Kathy Davis, Section Chief
Reregistration Section II
Accelerated Reregistration Branch
Special Review and
Reregistration Division

Enclosure

cc: Joanne Miller, PM-23
Leung Cheng, HED

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