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

MAY 3 1993

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#2F4036. Flumetsulam (DE-498) on Soybeans. Addendum to 4/14/93 Review (No MRID #).

FROM: Nancy Dodd, Chemist
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THROUGH: Debra Edwards, Ph.D., Chief
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TO: Joanne Miller, PM#23
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and

Albin Kocialski, Section Head
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The HED Metabolism Committee determined on 4/21/93 that the residue of concern in soybeans and field corn is flumetsulam per se. This decision makes it necessary for CBTS to reevaluate the deficiencies listed in the review of PP#2F4036 dated 4/14/93 (N. Dodd).

PP#2F4036 now pertains to soybeans only. PP#3F4185 pertains to field corn.

A revised Section F has been submitted which proposes a tolerance for residues of the herbicide N-(2,6-difluorophenyl)-5-methyl-(1,2,4)-triazolo-[1,5a]-pyrimidine-2-sulfonamide on soybeans at 0.05 ppm.

This addendum discusses deficiencies related to soybeans. Deficiencies concerning field corn will be addressed in PP#3F4185.

DETAILED CONSIDERATIONS

Outstanding CBTS data deficiencies concerning soybeans from N.Dodd's review of PP#2F4036 dated 4/14/93 are repeated below, followed by the status in light of the HED Metabolism Committee decision regarding the residue of concern.

CBTS's Deficiency #13b

The nature of the residue in soybeans is adequately understood. The major residues in soybean forage are parent and the metabolite N-(2,6-difluorophenyl)-5-((3-hydroxy-1-methylpropyl)amino)-1,2,4-triazole-3-sulfonamide and its conjugates. The major residues in soybean beans are parent and DFATSA (N-(2,6-difluorophenyl)-5-amino-1H-1,2,4-triazole-3-sulfonamide). The residues of concern in soybeans will be determined by the HED Metabolism Committee.

If residues other than parent are determined to be of concern in soybeans, analytical methods would be needed for those residues of concern. Independent laboratory validations and EPA laboratory validations would be needed for those methods. Extractability of the aged residues by the solvent used in the proposed enforcement method would have to be determined.

CBTS's Conclusion #13b

Deficiency #13b is resolved. The residue of concern for this use on soybeans is flumetsulam per se.

CBTS's Deficiency #15

The nature of the residue in animals is adequately defined for this proposed use provided that no detectable or very low residues are found in feed items. The residue of concern in ruminants is flumetsulam per se. The residues of concern in poultry are flumetsulam per se and the 5-hydroxy metabolite.

For uses that may result in detectable residues in feed items, additional animal metabolism data on ruminants and poultry may be required.

CBTS's Conclusion #15

Deficiency #15 is resolved. The nature of the residue in animals is adequately defined for this proposed use since no detectable residues of flumetsulam per se (the residue of concern in soybeans) were found in feed items. Tolerances are not required on animal commodities for this use. If such tolerances are needed in the future, the residue of concern in ruminants would be flumetsulam per se. The residues of concern in poultry would be flumetsulam per se and the 5-hydroxy metabolite.

CBTS's Deficiency #16i

The issues raised by ACS concerning the EPA method validation of ACR 91.6 on soybean grain and ACR 91.6.1S on corn grain and corn fodder have been satisfactorily addressed by the petitioner. Adequate enforcement methods (revised analytical methods ACR 91.6R on soybeans and ACR 91.6.S1R on field corn, both dated 4/7/93) are available for flumetsulam per se on soybeans and field corn. However, if additional residues besides parent are determined to be of concern, enforcement methods for those residues would be needed.

CBTS's Conclusion #16i

Deficiency #16i is resolved since the residue of concern in soybeans is flumetsulam per se.

CBTS's Deficiency #18

No analytical methods have been submitted for animal commodities. Analytical methods for animal commodities will not be required provided that no detectable or very low residues are found in feed items and no detectable residues are expected to occur in animal commodities as a result of the proposed use.

CBTS's Conclusion #18

Deficiency #18 is resolved since no detectable residues of flumetsulam per se (the residue of concern) are expected to occur in feed items and animal commodities as a result of the proposed use.

CBTS's Deficiency #26

For the purposes of the permanent tolerances on soybeans, CBTS must reserve its conclusion regarding the need for animal feeding studies until questions regarding the nature of the residue and analytical methods are resolved. If no detectable residues are found in feed items, no animal feeding studies and no tolerances for animal commodities will be required.

CBTS's Conclusion #26

Deficiency #26 is resolved since no detectable residues of flumetsulam per se (the residue of concern) are found in feed items. No animal feeding studies and no tolerances for animal commodities will be required.

RECOMMENDATIONS

TOX considerations permitting, CBTS recommends for the proposed tolerance of 0.05 ppm for flumetsulam per se on soybeans.

cc: RF, SF, Circu., N. Dodd (CBTS), E. Haeberer (CBTS), PP#2F4036, PM#23, A. Kocialski (CCB)

RDI:E. Haeberer:5/3/93:R. Loranger:5/3/93
H7509C:CM#2:Rm804F:305-5681:N. Dodd:nd:5/3/93