PP#4407
12-14-95

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

DEC 14 1995

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP# 4F04407. Sulfentrazone in/on Soybeans. **Results of Petition Method Validation (PMV).** MRID#s 429321-09 and 432782-01. Chemical No 129081. Barcode D221190. CBTS# 16506.

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THRU: R. Quick, Section Head
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TO: JoAnne Miller, PM, Team 23
Registration Division (7505C)

FMC has submitted an application for permanent tolerances for the combined residues of the herbicide sulfentrazone (N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl]methanesulfonamide) and the major metabolite hydroxymethyl sulfentrazone (N-[2,4-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-hydroxymethyl-5-oxo-1H-1,2,4-triazol-1-yl]phenyl] methanesulfonamide). The petitioner has proposed the following tolerance (expressed as parent plus the metabolite hydroxymethyl sulfentrazone): Soybean Seed -- 0.05 ppm.

On 2/16/95, CBTS requested that ACL perform a PMV on the following method:

Residue Analytical Method for the Determination of FMC 97285 and FMC 106091 in/on Soybeans Treated with F6285. P-2811M. MRID# 429321-09

The results of the PMV and the TMV Pre-review are appended to this memorandum as Attachments 1 & 2.

1

Results

The average recovery for sulfentrazone was 90.5 ± 18.8%; ; and for hydroxymethyl sulfentrazone, was 100.1 ± 7.4%. One analyst can extract and clean-up six samples in 8 hours.

Conclusions

The recoveries are acceptable. The following comments were made by ACL in the PMV results (Memo, M. Law 10/27/95):

1) The analytical standards are not available from the EPA repository in RTP.

2) In the final SPE clean-up step, the vacuum should be 5" Hg.

3) For drying the C-8 SPE columns, 30 psi nitrogen pressure with at least 30 minutes drying time must be specified.

The following additional comments were made by ACL in the TMV Pre-review (Memo, E. Greer, Jr. 3/21/95):

4) Section IV.E should be modified to include the specifications for the GC column.

5) Section V.A.1 should be modified to provide directions for filtration of additional rinsates.

6) Section V.A.3 should be modified to provide directions on whether the silica cartridge is allowed to go dry and to provide a temperature for the N-Evap.

7) Section V.A.4 should be modified to provide a temperature for the N-Evap.

8) Specific instructions should be provided for preparing the standards for derivatization.

This method will be suitable for enforcement purposes once the revisions recommended by ACL are incorporated.

Recommendations

The registrant should submit standards (conclusion 1) to the EPA repository in RTP and a revised version of the proposed analytical enforcement method as specified in conclusions 2-8. Until the receipt of the standard and the revised method, the requirements for analytical enforcement methodology will remain unfulfilled.

2

Attachment 1- Memo, M. Law 10/27/95
Attachment 2- Memo, E. Greer, Jr. 3/21/95

cc (with Attachments): M. Clower (FDA, HFS-335)
cc (w/o Attachment): PP#4F04407, S.F., Kramer, Circ., R.F., H. Hundley (7503W)
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