2/2/94

MEMORANDUM

SUBJECT: PP#3F4187. Thiazopyr in/on Citrus and Cottonseed. Petition Method Validation Request. MRID# 426197-12. No CBTS#. DP Barcode#189115.

FROM: Jerry B. Stokes, Chemist
Tolerance Section III
Chemistry Branch/Tolerance Support
Health Effects Division (7509C)

THRU: Debra Edwards, Ph.D., Chief
Chemistry Branch/Tolerance Support
Health Effects Division (7509C)

TO: Donald A. Marlow, Chief
Analytical Chemistry Branch
Benefits and Economic Analysis Division (7503W)

Monsanto Company has proposed permanent tolerances for residues of herbicide thiazopyr [3-pyridine carboxylic acid, 2-(difluoromethyl)-5-(4,5-dihydro-2-thiazolyl)-4-(2-methylpropyl)-6-(trifluoromethyl)-, methyl ester] and its metabolites determined as 3-pyridine carboxylic acid, 5-(aminocarbonyl)-2-(difluoromethyl)-4-(2-methylpropyl)-6-trifluoromethyl-, methyl ester and 3-pyridine carboxylic acid, 2-(difluoromethyl)-4-(2-methylpropyl)-5-(((2-sulfoethyl)amino)carbonyl)-6-trifluoromethyl and expressed as parent equivalents as follows: citrus, whole fruit, 0.05 ppm (group tolerance); cottonseed, 0.05 ppm; cotton, forage, 0.2 ppm.

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Thiazopyr is the proposed ANSI name.

CBTS requests that Method #RES-041-92, Version 0, (Attachment 1) be tested on citrus (whole fruit) and cottonseed at the fortification levels of 0.05 and 0.10 ppm as the enforcement method. Since this is a simplified version of the residue method used to measure thiazopyr residues in field samples, included is this residue methodology, and sample chromatograms and recovery data from this residue method. (Attachment 2).
Thiazopyr has passed a successful independent laboratory validation. (Attachment 3).

Samples should be run in duplicate at the requested fortification levels. Two copies of the appropriate method are attached along with chromatograms.

Please return the requested information on the attached forms as well as any other information CBTS should be aware of including copies of standard curves, sample calculations, and representative chromatograms for controls and fortified samples. Also, please provide an estimate of the detection limits for the method.

If any problems are encountered with the method, describe them in your report. Please do not discuss the trial with the petitioner prior to its completion so that it can be determined whether all necessary instructions are included in the method writeup.

Please return the results of the method trials to Philip V. Errico, Section Head, Chemistry Branch/Tolerance Support.

Attachment 1: Method # RES-041-92, Version 0, "GC/MS Enforcement Method for the Determination of Thiazopyr Residues in Raw Agricultural Commodities. Authored by J. D. Fuhrman, dated July 31, 1992, 22 pages. (Included in MRID# 426197-12).

Attachment 2: Method # RES-017-91, "Analytical Method for the Determination of Thiazopyr and Its Major Metabolites in Raw Agricultural Commodities. Authored by J. C. Allin, et al., dated July 1, 1992, 47 pages. Recovery tables and example chromatograms, 19 pages. (Included in MRID# 426197-12).

Attachment 3: "Validation of GC/MS Enforcement Method for the Determination of Thiazopyr Residues in Raw Agricultural Commodities. (RES-041-92). Authored by J. N. Kyranos, Ph.D., dated December 8, 1992, 47 pages. (Included in MRID# 426197-12).

cc with Attachments 1, 2, and 3: D. Marlow (ACB); M. Clower (FDA, HFS-335)

cc without Attachments 1, 2, and 3: Circu; R.F.; PP#3F4187; PMV/MTO File; J. Miller (PM 23); J. Stokes (CBTS)
RDI:Perrico:2/1/94:RLoranger:2/1/94
7509C:CBTS:CM#2:Rm803:JStokes:js:305-7561:2/2/94

PP3F4187

METHOD: # RES-041-92

"GC/MS Enforcement Method for the Determination of Thiazopyr Residues in Raw Agricultural Commodities." Authored by J. D. Fuhrman, dated July 31, 1992, 22 pages. (Included in MRID# 426197-12).

Do not use control values for recovery corrections.

Do not report control values as 0; if less than the limit of detection, report as such.

Commodity	Chemical Added	PPM Added	PPM Found	% Recovery
Citrus, whole fruit	thiazopyr	0		
		0.05		
		0.10		
Cottonseed	thiazopyr	0		
		0.05		
		0.10		

Special precautions to be taken:

Source of analytical reference standards:

If derivatized standard used, give source:

Instrumentation for quantitation:

Instrumentation for confirmation:

If instrument parameters differ from method given, list parameters used:

Commercial source for any special chemicals or apparatus:

Comments:

Chromatograms: