3/26/96

MEMORANDUM

SUBJECT: FAP#3F4187. Thiazopyr in/on Citrus. Petition Method Validation Request. MRID#'s 437499-01, 437499-02, 437499-03, and 439226-02. CBTS #17024. DP Barcode #D223900.

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

THRU: Ed Zager, Acting Chief
Chemistry Branch/Tolerance Support
Health Effects Division (7509C)

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

Rohm and Haas Company has requested the establishment of permanent tolerances for residues of the selective herbicide thiazopyr (ISO common name) [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 in/on citrus (orange and grapfruit), whole fruit, 0.05 ppm.

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CBTS is requesting that a petition method validation be run at the requested fortification levels of 0.025 (limit of quantitation) and 0.05 ppm (tolerance level) in orange. Samples should be run in duplicate at these fortification levels. Two copies of the appropriate method (Attachment 1), the independent laboratory validation (Attachment 2), an method addendum (Attachment 3), and validation data for citrus (Attachment 4) are attached.

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. Please provide an estimate of the detection and quantitation limits for the method.

If any problems are encountered with the method, describe them in your report. Please minimize contacts with the petitioner prior to completion of the trial 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 E. Zager, Acting Chief, Chemistry Branch/Tolerance Support.

Attachment 1: "Enforcement Analytical Method for the Determination of Thiazopyr and Its Metabolites in Dairy Cow Edible Tissues, Milk and Raw Agricultural Commodities." (MRID#437499-01). Authored by John D. Fuhrman. June 6, 1995.

Attachment 2: "Validation of Analytical Method for the Determination of Thiazopyr and Its Metabolites in Dairy Cow Edible Tissues, Milk and Raw Agricultural Commodities." (MRID#437499-02). Authored by James N. Kyranos. June 23, 1994.

Attachment 3: Addendum To MSL-13723, "Validation of Analytical Method for the Determination of Thiazopyr and Its Metabolites in Dairy Cow Edible Tissues, Milk and Raw Agricultural Commodities." (MRID#437499-03). Authored by John D. Fuhrman. June 13, 1995.

Attachment 4: "Enforcement Analytical Residue Method for Thiazopyr and Its Metabolites in Animal Tissues, Dairy Cow Raw Milk, Citrus Whole Fruit and Citrus Processed Fractions." (MRID#439226-02). Authored by Y. Cui. January 12, 1996.

cc with Attachments 1, 2, 3, and 4: D. Marlow (ACB); J. Stokes (CBTS)

cc without Attachments 1, 2, 3, and 4: Circ; RF; FAP#3F4187; PMV/MTO File; J. Miller/E. Wilson (PM 23)
RDI:EHaeberer:03/21/96:RLoranger:03/21/96:EZager:03/22/96
7509C:CBTS:CM#2:Rm803:JStokes:js:305-7561:03/26/96

PP3F4187

METHOD: "Enforcement Analytical Method for the Determination of Thiazopyr and Its Metabolites in Dairy Cow Edible Tissues, Milk and Raw Agricultural Commodities." (MRID#437499-01). Authored by John D. Fuhrman. June 6, 1995.

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.

Limit of Quantitation (LOQ): ca. 0.025 ppm
Limit of Detection (LOD): undefined
Proposed tolerance level: 0.05 ppm

Commodity	Chemical Name	PPM Added	PPM Found	% Recovery
orange	thiazopyr	0.025		
orange	thiazopyr	0.05		
orange	control	0.0		

Modifications to method (major or minor):

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: