



8-3-89 RL

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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

AUG 03 1989

MEMORANDUM:

SUBJECT: PP#8F3607: Glufosinate-Ammonium (IGNITE) in or on Soybean Seed, Apples, Grapes, Field Corn (Grain, Forage, Fodder, and Silage), Nuts, and Almond Hulls. Request for Method Validation of Revised Proposed Enforcement Methodology by Analytical Chemistry Section MRID Nos. 410958-01 and 410958-02 DEB No. 5358

FROM: Joel Garbus, PhD., Chemist *Joel Garbus*
Permanent Tolerance Section III
Dietary Exposure Branch (H7509c)

THRU: - R. D. Schmitt, PhD., Acting Chief *Richard D. Schmitt*
Dietary Exposure Branch
Health Effects Division (H7509C)

TO: D. Marlow, Chief
Analytical Chemistry Branch
Biological and Economic Analysis Division (H7503C)

Hoechst-Celanese has petitioned for permanent tolerances for the herbicide glufosinate-ammonium, (Ignite), and its metabolite, 3-methylphosphinicopropionic acid, in or on soybean seed, apples, grapes, field corn (grain, forage, fodder, and silage), and nuts at 0.05 ppm and in or on almond hulls at 0.50 ppm.

DEB requested that a method validation be initiated for glufosinate-ammonium and its metabolite on the above r.a.c.'s using the method submitted with the petition. (DEB memo of 3/21/88)

The Analytical Chemistry Section responded to this request by stating that before ACS could initiate laboratory work, deficiencies in the description of the proposed enforcement methodology would need to be addressed or resolved. (Warren Bontoyan, memo, 6/23/88)

Hoechst-Celanese has now submitted a revised version of the proposed enforcement methodology that according to the petitioner addresses all of the deficiencies noted in ACS's memo.

DEB now requests that a petition method validation be conducted for glufosinate-ammonium and its metabolite, 3-methylphosphinicopropionic acid.

Samples should be run in duplicate at the suggested fortification levels. (See attached tables.) Two copies of the appropriate method, along with recoveries and sample chromatograms are attached.

Please return the requested information on the attached forms, together with other information concerning the method trial that we should be aware of including copies of chromatograms for representative control and tolerance level samples, standard curves, examples of sample calculations, and all data generated by your branch's SOP for method trials.

One of the purposes of conducting a method trial is to determine whether all necessary instructions are included in the submitted method. For this reason we are requesting that laboratory staff scientists not discuss this PMV with the petitioner. Any problems encountered should be documented and included in your report. The registrant will be informed of any deficiencies in the method and asked to resolve them.

Analytical standards are available for glufosinate-ammonium and its metabolite from the EPA repository. Standards and their derivitized forms are also available from Hoechst-Roussel Agri-Vet Co., Somerville, NJ.

Please forward the results of this method try-out to P. Errico, Section Head, Permanent Tolerance Section III, Dietary Exposure Branch.

attachment: Enforcement Procedure: Analytical Method - HRAV 5A
Gas Chromatographic Determination of HOE-039866 [Ammonium-DL-Homoalanine-4-yl(Methyl)phosphinate] and its Metabolite, HOE-061517, 3-Methylphosphinico-Propionic Acid] as a Residue in Apples, Grapes, Soybeans, Corn, and Tree Nuts

cc with attachment (2 copies of method): D. Marlow [1 copy],
P. Corneliussen (FDA, HFF426) [1 copy]

cc without attachment: R.F.; Circ.; M. Bradley (PAM-2 editor);
Thompson; MTO F; Garbus; PM-23; K. Kissler; W. Bontoyan; PP#8F3607
;PMSD/ISB (Eldredge)

RDI:PE:7/31/89:RDS:7/31/89
H7509c:DEB:JG:jg:7/31/89:CM#2:803a:557-1405

2