10/7/85

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

OCT 7 1985

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject: Metsulfuron methyl (Du Pont Ally®) Revised Analytical Methods.

From : Sami Malak, Ph.D., Chemist
Tolerance Petition Section III
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

Thru : Philip V. Errico, Head
Tolerance Petition Section III
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

To : Robert J. Taylor, PM# 25
Fungicide-Herbicide Branch
Registration Division (TS-767)

The petitioner, E. I. Du Pont De Nemours & Company submitted two revised residue methods reports for metsulfuron methyl 2-[[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl) amino] carbonyl] amino] sulfonyl] benzoate, a new herbicide intended for use on small grains. The reports are:

1. "Determination of Residues of Metsulfuron Methyl in Crops by liquid Chromatography". Du Pont Document No. AMR 104-82, Revised November 26, 1984.

2. "Determination of Residues of Metsulfuron Methyl Metabolite A and metabolite A1 in cereal Grain Crops by Liquid Chromatography. Du Pont Document No. AMR 238-84. Revised May 13, 1985 (an identical copy with minor clarification of the calculation is included in PP #4F3127, except that the revision date is 7/24/85).

The first report describes a revised method for detection of the parent metsulfuron methyl and replaces the original method (Du Pont Document No.AMR 104-82, EPA Accession NO. 071434) submitted in connection with PP #3G2834. We note that the only difference between the two methods is a further cleanup on silica Bond Elut® cartridge in the revised method after the

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extraction into toluene from an acidic aqueous solution. All other techniques in both reports are identical. The modification in the revised method did not affect the average recovery of 84%, or the minimum detectibility of 50 ppb in straw and 20 ppb in the remaining grain commodities.

The second report describes a revised method for the detection of metabolites A and A1 and replaces the original method (Du Pont Document No. AMR 238-84, EPA Accession No. 072767) submitted in connection with PP #4F3127.

The Company is also requesting that the revised reports be attached to and made part of Section D of PP #4F3127. Report #1 (method AMR 104-82,revised 11/26/84) is stamped "Confidential, Not for Publication". We note, however, that a copy of report #1 that has not been stamped "Confidential" is included in PP #4F3127. Du Pont also requests the initiation of a method trial. The appropriateness of a method trial is presently being evaluated in the 8/1/85 amendment to PP #4F3127.

Conclusions and Recommendations

1. RCB recommends that the revised analytical method in report #1 entitled "Determination of Residues of Metsulfuron Methyl in Crops by Liquid Chromatography"; Du Pont No. AMR 104-82, revised November 26, 1984; replaces the original method, Du Pont No. AMR 104-82, accessioin No. 071434, submitted in connection with PP #3G2834. A clean copy not stamped "Confidential" may obtained from PP #4F3127.

2. The revised reports #'s 1 and 2; Du Pont No's AM 104-82, revised 11/26/84 and AM 238-84, revised 7/24/85 are already included in Section D of PP #4F3127, accession #072767.

3. The appropriateness of a method trial is presently being evaluated in the 8/1/85 Amendment to PP #4F3127.

RDI: P.Errico:10/3/85:RDSchmitt:10/3/85
TS-769-RCB:S.Malak:RM;810:CM#2:X-557-7377:10/3/85
cc: R.F., S.F., Circu , S. Malak, PP #3G2834, PP #4F3127.

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