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

AUG 15 1986

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#3F2904. Sethoxydim (Poast®) on Alfalfa and Soybeans. Method Trial Request.

FROM : Sami Malak, Ph.D., Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU : Charles L. Trichilo, Ph.D, Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO : Donald A. Marlow, Chief
Chemical Operation Branch, BUD (TS-768)

BASF Wyandotte Corporation (BWC) is proposing establishment of permanent tolerance for residues of the herbicide, sethoxydim, 2-[1-(ethoxyimino)butyl]-5-[2-(ethylthio]-3-hydroxy-2-cyclohexene-1-one and its metabolites containing the 2-cyclohexene-1-one moiety (calculated as herbicide) in or on soybean hay at 10 ppm and alfalfa forage and hay at 40 ppm. The pesticide is regulated under 40CFR§180.412.

The current enforcement methodology which is outlined in PAM II as Method I has been successfully tried for the parent compound, sethoxydim, per se, and its metabolites MSO_2, $M2SO_2$, and 5-OH-MSO_2. Other metabolites of signifacance, recently detected in livestock commodities are: M1SO, nor-MSO, nor-MSO_2, and nor-DME. In our memo of subject petition (S. Malak, 1/23/86), the petitioner was requested to send reference standards of these metabolites to EPA, RTP and COB, Beltsville Laboratory. These samples were received by the COB in Beltsville (K. Kissler phone comunication with S. Malak, 8/12/86).

A method trial is requested for the afore mentioned metabolites namely: M1SO, nor-MSO, nor-MSO_2, and nor-DME, on Milk and Beef liver using the existing enforcement methodology as outlined in PAM II as Method I for sethoxydim (Poast®); also known as BWC-30. Samples should be run in duplicate at the requested fortification levels (see attached Table, page 3).

Please return the requested information on the attached forms and any other information concerning the method trial that we should be aware of including copies of chromatograms for representative controls, and fortified samples, standard curves and also submit examples of sample calculations.

The completed report of the MTO should be sent to Sami Malak of RCB.

There is no "projected return date" for this action since RCB is not holding establishment of the requested tolerances pending completion of the this method tryout.

Attachment: BAS Wyandotte Corp. method BWC-30, copied from PAM II, Method I; entitled: "Gas-Chromatographic Determination of Residues of Poast and Its Metabolites in Soybean Seed, Soybean Seed Process Fractions, Chicken tissues, Beef Tissues, Milk, and Eggs"; developed by Peter Beutel and modified by Paul G. King; March 15, 1982.

cc with Attachment: D. Marlow (only).

TS-769:RCB:S.Malak:CM#2:RM810:x577-7330:8/14/86
cc: RF, Circu, M.Bradley, Thompson, FDA, PP#6F2904, PM#25 (R. Taylor), K. Kissler, W. Bontoyam, MTO
RDI: P.V.Errico: 8/14/86:R.D.Schmitt:8/14/86

Method: BAS Wyandotte Corp. Method BWC-30, Also listed in PAM II as Method I; entitled: "Gas-Chromatographic Determination of Residues of Poast and Its Metabolites in Soybean Seed, Soybean Seed Process Fractions, Chicken tissues, Beef Tissues, Milk, and Eggs"; developed by Peter Beutel and modified by Paul G. King; March 15, 1982.

Do not use control values for recovery corrections.

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

Commodity	Chemical Added	PPM Added	PPM Found	% Recovery
Milk	Control	0.0		
	MlSO	0.05		
		0.1		
	nor-MSO	0.05		
		0.1		
	nor-MSO_2	0.05		
		0.1		
	nor-DME	0.05		
		0.1		
Beef Liver	Control	0.0		
	MlSO	0.2		
		0.4		
	nor-MSO	0.2		
		0.4		
	nor-MSO_2	0.2		
		0.4		
	nor-DME	0.2		
		0.4		

USE SEPARATE FORM FOR EACH METHOD

Modifications to method (major or minor):

Special precautions to be taken:

Source of analytical reference standards:

If derivitized 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: