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

JUL 1 1987

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#7G3479. Myclobutanil (RH-3866) on apples and grapes. Method trial request.

FROM: Richard Loranger, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)
R. Loranger

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

TO: Donald A. Marlow, Chief
Chemical Operations Branch
Benefits and Use Division (TS-768C)

The Rohm and Haas Company has proposed temporary tolerances for residues of the fungicide alpha-butyl-alpha-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile and its metabolites on apples, grapes, their byproducts, meat, milk and eggs. This chemical is also known by the names myclobutanil and RH-3866.

We are requesting that two analytical methods be tested. The first method (Technical Report No. 310-84-13) is to be examined for just its ability to measure RH-3866 in milk and liver, even though it is also claimed capable of determining parent compound and metabolite RH-9090 in crops (see page 2 for structures). A modification of this method or perhaps a new procedure will probably have to be tested in the future for metabolites in animal commodities.

The second method (TR No. 310-84-27) has been developed for crops only, but determines myclobutanil and several metabolites. We are requesting that this method be tried for two chemicals on one commodity (grapes or apples).

Samples should be run in duplicate at the requested fortification levels. Two copies of each method are attached along with chromatograms. Please note that an addendum has been issued for each procedure. The method trials should include the revisions given in these addenda.

Please return the requested information on the attached forms as well as any other information we 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 each method on the various commodities.

Rohm and Haas has been contacted by RCB (R. Loranger, 6/25/87 & 6/29/87) regarding the need for analytical reference standards of myclobutanil (RH-3866) and its metabolite RH-9090. You should obtain your standards from RTP when they are available.

We do not plan to require completion of the method trials for a favorable response to the temporary tolerance requests. However, in light of the fact that a permanent tolerance petition is also already under review, the method trials should be initiated as soon as possible.

Please forward the results of the method trials to Andrew Rathman, Section Head, Residue Chemistry Branch.

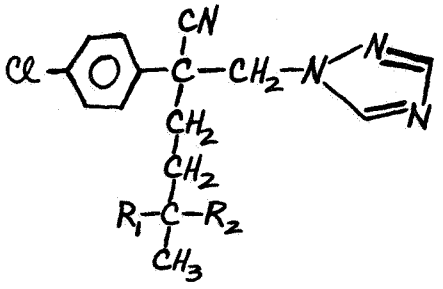
Attachment 1 (2 pages-to all copies)

Attachment 2 (2 pages-to all copies)

Attachment 3: Analytical Method (TR # 310-84-13)(2 copies-to addressee only)

Attachment 4: Analytical Method (TR # 310-84-27)(2 copies-to addressee only)

cc: Circu, RF, PP#7G3479, M. Bradley, R. Loranger, MTO File, L. Rossi (PM 21), R. Thompson, K. Kissler, W. Bontoyan
RDI:Section Head:ARRathman:6/29/87:RDSchmitt:6/29/87
TS-769:RCB:557-7324:RAL:ral(3):CM#2:RM.810:Date:7/1/87



R_1=R_2=H RH-3866; myclobutanil; alpha-butyl-alpha-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile

R_1=H R_2=OH RH-9090; alpha-(3-hydroxybutyl)-alpha-(4-chlorophenyl)-1H-1,2,4-triazole-1-propanenitrile

METHOD:

"Analytical Method for the Measure of RH-3866 Residues in Various Crops, Soil, Meat, Milk and Eggs and RH-9090 Residues in Various Crops and Soil." (Technical Report No. 310-84-13; completed June 18,1984) Include "Addendum to Technical Report No. 310-84-13, Analytical Method for RH-3866 and RH-9090." (Technical Report No. 310-86-09; completed February 12, 1986)

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
Milk	RH-3866	0		
		0.02		
		0.04		
Beef liver	RH-3866	0		
		0.2		
		0.4		

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:

METHOD:

"RH-3866 Total Analytical Method for Apple and Grape" (Technical Report No. 310-84-27; completed November 16, 1984) Include "Addendum to RH-3866 Total Analytical Method for Grape and Apple" (Laboratory Project I.D. 31H-86-15; completed July 8, 1986)

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
Apples or grapes	RH-3866	0		
		0.5		
		1.0		
	RH-9090	0		
		0.5		
		1.0		

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: