

2-28-67

RENeY:scd 2/28/67

Evaluation of Temporary Permit
Temporary Tolerance C. P. No. 6G0503
For Endothall (salt)
Submitted by Pennsalt Chemical Corporation
On February 2, 1967

INTRODUCTION

The name of the chemical is Mono (N,N-dimethylalkylamine)** salt of endothall [7-oxabicyclo (2.2.1) heptane-2,3-dicarboxylic acid], ** the alkyl groups as in fatty acids of coconut oil. The tradename is Accelerate.

The name of the product is accelerate. The formulation is as follows:

Endothall 15.90%

Contains 0.52 lbs. Endothall per gallon.

Request for negligible residue tolerance of 0.01 ppm in or on cotton-seed expressed as endothall.

DIRECTIONS FOR USE

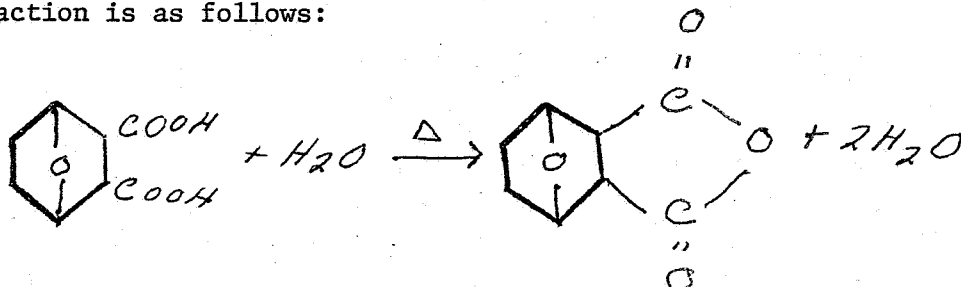
Cotton - apply one pint of organic phosphate defoliant with 1 1/2 pints per acre (0.0975 lbs. A/A) Accelerate. Tank mix with water. Apply 3 to 7 days before harvest.

ANALYTICAL METHOD

A GC method is presented. Extract with acetone, filter, and evaporate to dryness. Extract with chloroform and water, filter water and evaporate to dryness. Transfer with water to watch glass containing hydrochloric acid and evaporate. Transfer sublimate (now anhydride) to beaker with methanol and evaporate. Transfer to tared serum vial, and take an aliquote to be determined by GC using an aerograph Model 600B hydrogen flame ionization detector.

INSECT INGREDIENT INFORMATION IS NOT INCLUDED

Sublimation reaction is as follows:



Method appears to be adequate. However, there are interferences that could interfere with the endothall peak. The sensitivity of the method is best at 0.05 ppm.

A method for DMCA is also presented as well as metabolite method.

The metabolites, products of endothall, are carbon dioxide and water.

DISCUSSION OF DATA

Some of the data submitted on cottonseed are as follows:

DOSAGE pts./A	ENDOTHALL + lbs. A/A	PHI	RESIDUE IN PPM
2 pts Folex	+ 0.195	1 hr.	0.001
" "	" "	1 day	None
" "	+ "	4 days	0.002
--	0.26	1 hr.	None
--	"	1 day	"
--	"	4 days	"

DMCA	PHI	RESIDUE DMCA
Folex + 0.57	5	0.027
DEF + 0.57	7	0.012
DEF + 0.38	4	0.03
Folex + 0.57	4	0.047

DOSAGE pts./A	lbs. A/A	PHI	RESIDUES acid delented seed coat	seed meat	fuzzy seed coat	seed meat
--	1.04	3	0	0	0.655	0
3 pt. Folex +	1.04	3	0	0	0.107	0
-- +	1.04	3	0	0	0	0
3 pt. Folex +	1.04	3	0	0	0.369	0

Data are adequate.

RECOMMENDATION

It is recommended that the permit be granted when FDA establishes a temporary tolerance.