

6-29-71

FTSanders:REney:ow  
June 29, 1971

Evaluation for Registration of PP No. 1F1057  
for Endothall (Mono-N,N-dimethyl-alkylamine salt  
of 7-oxabicyclo (2.2.1) heptane-2,3-dicarboxylic acid)  
Submitted by Pennwalt Corporation  
Filed March 29, 1971

## I. Introduction

1. A temporary permit was issued for the use of endothall in or on potatoes May 1967 at the 0.01 ppm level.
2. Other endothall petitions are for use on cotton (PP No. 7F0570) and cottonseed (PP No. 0F0972).
3. The petitioner is proposing the establishment of a 0.2 ppm tolerance (negligible residues) in or on potatoes.
4. Product Name: Des-1-Cate Potato Vine Killer  
(Reg. No. 4581-206)

### Formulation:

#### Active Ingredient:

Mono(N,N-dimethyl alkylamine) salt of Endothall --- 15.9%

Inert Ingredient ----- 84.1%

## II. Directions for Use

Apply to potato vines 10 to 14 days prior to harvest.

Light to medium vine growth - Apply 1 1/2 to 2 gallons per acre in 20 to 100 gallons of total spray. Use higher rates during cool, cloudy weather. (0.78 - 1.04 lbs/A/A)

Heavy Vine growth - Apply 2 gallons of Des-1-Cate per acre in 20 to 100 gallons of total spray. (1.04 lbs/A/A)

Toxic to fish. Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes and containers.

Addition of 3 to 5 gal/A of diesel fuel or 1 pt of paraffin base herbicidal oil for each 20 gallons total spray may increase speed and overall vine and weed kill.

### III. Analytical Method

The analytical method used for determining residues of endothall is as follows: Endothall residues are reacted with 2-chloroethylamine hydrochloride to produce the corresponding imide derivative. The imide is determined by microcoulometric gas chromatography with a nitrogen detection system.

### IV. Discussion of Data

#### 1. Potatoes

Gal/A	Gal of Water	PHI	PPM
1.5	100	13	0.03
1.5	80	8	0.06
2.0	98	5	N.D.
2.0	98	11	0.07
2.0	98	12	0.06
3.0	50	13	N.D.
3.0	23	8	0.07

Residue data appears to support the proposed tolerance level and PHI.

2. Environmental data, animal feeding and C<sup>14</sup> tracer studies are reported in PP No. OF0972. This data was determined to be adequate by the reviewer of the PP No. OF0972.

### V. Conclusion and Recommendation

A favorable opinion for registration is given.