

Niley

REney:rjt
10/17/68

Evaluation of Pesticide Petition No. 9F0762
for O,O-dimethyl S-[4-oxo-1,2,3-benzotriazin-3 (4H)-
ylmethyl] phosphorodithioate (Guthion)
Submitted by Chemagro Corporation
Filed October 9, 1968

INTRODUCTION

The petition is proposing a 2 ppm tolerance on tomatoes from a post-harvest application of Guthion.

There is a 2 ppm tolerance on tomatoes at 0.75 lbsA/A, no limitations as pre-harvest use.

The names of the products are Guthion 2% Dust, Guthion 25% WP, Guthion 50% WP, Guthion Spray Concentrate (2 lbs.A/gal) and Guthion Liquid Concentrate (2 lbs./gal)

DIRECTIONS FOR USE

Tomatoes processing - Guthion 2% Dust formulation only. 1 lbs.(0.02 lbs/A) post-harvest. Apply specified dosage per ton of tomatoes (1/3 oz./5/8 bushel basket or 1 lug). Apply dust uniformly over the top of lugs and baskets. Tomatoes must be washed prior to processing.

Tomatoes - Guthion 25% WP, 50% WP, Spray Concentrate and Liquid Concentrate. Apply specified dosages/A in sufficient H₂O for complete coverage. Repeat as necessary. Changes are as follows: Highest dosage increased from 0.75 lbs.A/A to 6 lbs.A/A. The high rates should be used where heavy infestation of late instar lepidopterous larvae and pinworms are present. Rate of 0.75 lbs.A/A or less may be applied up to day of harvest. Rates of above 0.75 lbs.A/A require an interval of 14 days between application and harvest.

These changes do not require an opinion, because the pre-harvest application is registered with a tolerance of 2 ppm on tomatoes. Data will be listed in order to same time for review when new use is registered.

ANALYTICAL METHOD

Thermionic Emission GC. Report No. 18,537.

Colorimetric Method - Report No. 18,688

Methods have been approved.

DISCUSSION OF DATA

Post-harvest application to tomatoes

oz.A/ton	Day to processing	Residues in ppm		
		Unwashed	Washed	Canned
0.32	1	0.2	ND	ND
0.64	1	0.4	"	"
0.64	1	0.9	"	"

The application of 0.64 oz.A/ton is twice the recommended rate. All data submitted was from 1% Dust formulation and not the 2% Dust formulation.

The following data is listed in support of the increase from 0.75 lbs.A/A to 1.5 lbs.A/A pre-harvest to tomatoes.

Formulation Use	Lbs.A/A	No. of Applic.	No. of Samples	PHI	Residues in ppm
25% WP	1.5	3	5	15	0.8 - 1.5
2Z D	1.5	4	1	7	0.05
Spray	1.5	4	1	7	0.07
25% WP	1.5	4	1	14	1.03
Spray	1.5	4	1	7	0.32
2.5% WP	1.5	4	1	7	0.35
Spray	1.5	4	1	7	0.09
1Z D	1.5	6	1	7	0.03

Data would support an increase too, from 0.75 lb.A/A to 1.5 lbs.A/A.

CONCLUSION

Only tomatoes held for processing would receive post-harvest application.

RECOMMENDATION

A favorable opinion is given to the post-harvest application.