Environmental Chemistry Review for Naled; 1,2-dibromo-2,2-dichloroethyl dimethyl phosphate [Dibrom]

11-7-74

PP# 0F0975 Reg. No. 239-1281 Chevron Chemical Co.

I. Introduction

- 1. Dibrom 8 Emulsive
- 2. Various crops
- 3. See review of PP# 0F0975 dated 6/24/70 and reevaluation no. 1 dated 6/26/72.
- 4. Directions for use involve revisions from previous labels. This label is not accepted yet.
- II. Directions for Use all crops listed are found in Section F (tolerance) of PP# 0F0975, April 1970.
 - 1. Alfalfa withdrawn from label
 - Beans, Lima beans (dry form); Beans, Lima beans and Peas (succulent form) 0.9-1.35 lb. ai/A
 Do not apply within 1 day of harvest
 Do not feed treated vines.
 - 3. Grapes 0.45-0.6 lb. a1/A l day PHI.
 - 4. Collard, Kale 0.9-1.8 lb. a1/A l day PHI.
 - 5. Celery 0.9-1.35 lb. ai/A 1 day PHI.
 - 6. Peaches .68 1b. ai/A (Western States only) 30 day PHI to avoid fruit spotting
 - 7. Sugar beets 0.9 lb. a1/A 2 day PHI do not feed tops
 - 8. Sugar cane deleted from label
 - 9. Walnuts 0.45-0.9 lb. ai/A 10 day PHI
 - 10. Cotton 0.9 lb. ai/A
 Apply at 7-10 day intervals while insects persist.
 Do not apply after first bolls open.
 Do not graze livestock in treated fields.
 - 11. Grass Pasture and ranges
 Do not apply more than once every 10 days to areas where lactating dairy animals are being held.

III. Discussion of Data

Analytical Method

Sample is frozen and macerated in a Hobart food chopper. Samples and standard (1 ppm aqueous bromide) are irradiated 2 hours in a TRIGA reactor at a neutron flux of 3×10^{12} n/cm²/sec.

Sample allowed to cool 24 hours to allow decay of $^{24}\mathrm{Na}$ and $^{42}\mathrm{K}$

Gamma rays spectroscopy, recording gamma rays from 0-1.0 Mev. The ⁸²Br gamma ray peak at .554 Mev is used for quantitative measurements. It is integrated over 10 channells and corrected for dead time and mactor neutron flux variations.

Bromide content calculated by comparing total counts of the samples and the standard bromide solution.

2. No environmental chemistry data submitted with this submission. All studies were field residue studies.

IV. Recommendations

NAC

Ronald E. Ney, Jr. 11/1/74 Frank J. Schenck 11/1/74

Environmental Chemistry Review Section

Ecological Effects Branch

j.t/11-6-74