

US EPA ARCHIVE DOCUMENT

**EFFICACY STUDY REVIEW**

by Kevin J. Sweeney, Entomologist - IB

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To: Olga Odiott

Date: June 28, 2004

EPA Reg. No. or File Symbol: 1021-1667 and 1021-1588

Product Name: Evercide House and Garden Spray 2664 and Multicide House and Garden Insect Killer 2553.

Registrant: MGK

PM: George LaRocca, PM 13

Dec # 338793 and 337577

DP: 299482 and 304660

Chemical: 2664 = 0.217% permethrin; tetramethrin 0.2% Type: (I) Insecticide  
2553 = 0.20% tetramethrin and d-phenothrin 0.20% Type: (I) Insecticide

OPPTS Guidelines: 810.35 and 810.34

GLP?: No.

Sites: outdoor residential

Pests: many residential pests but this amendment is for adult mosquitoes

Formulation: RTU aerosol spray

Request: Review data submitted in support of new West Nile virus claims related to longevity of protection - up to eight hours.

Studies Submitted:

**MRID 4613201** Evaluation of the Residual Efficacy of Two Aerosol Sprays (F-2553 and F-2664), when Applied to Screens against mosquitoes (*Aedes aegypti* and *Culex quinquefasciatus*) by ICR.

This study not conducted according to GLP. This was a laboratory study with the mosquitoes to evaluate the longevity of the subjects products when sprayed on screen cages (six square feet treated). The subject products were sprayed on different cages and aged out of doors for eight hours. Twenty (actual 16-24) mosquitoes were released into each treated cage and a control. Knockdown was recorded at 10, 50, and 90 minutes (the study says otherwise but reported these KD values) Twenty-four hour mortality was also recorded. The test was replicated ten times for each mosquito species with each of the subject products.

The results showed that the subject products killed the tested mosquitoes eight hours after application to screening (*Culex quinquefasciatus* may transmit WNV to humans.). KD was satisfactory but not immediate. Repellency was not evaluated.

Entomologist's Recommendations:

1. The submitted studies support the new label claims related to WNV except as follows:

- a. Remove eight hour protection
- b. Remove eight hour barrier.
- c. ~~Fog your yard patio for 8 hours of protection against mosquitoes that carry West Nile virus.~~

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