

US EPA ARCHIVE DOCUMENT

Shaughnessy No: 047802

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To: Dennis Edwards  
Product Manager #12  
Registration Division (TS-767C)

1988

From: Michael Firestone, Chief  
Special Review Section  
Exposure Assessment Branch  
Hazard Evaluation Division (TS-769C)

*Michael P. Firestone*

Thru: Paul F. Schuda, Chief  
Exposure Assessment Branch  
Hazard Evaluation Division (TS-769C)

*Paul F. Schuda*

Attached, please find the EAB review of:

Reg./File # : 11556-62

Chemical Name : Propoxur

Type Product : Insecticide

Product Name : \_\_\_\_\_

Company Name : Mobay Corporation

Purpose : Protocol Review for Exposure Study -

Pest Control Strips

Date Received : 4/8/88 Action Code: 352

Date Completed: \_\_\_\_\_ EAB #(s): 80641

Monitoring study requested: X Total Reviewing Time: 1 day

Monitoring study voluntarily: \_\_\_\_\_

Deferrals to: \_\_\_\_\_ Ecological Effects Branch

\_\_\_\_\_ Residue Chemistry Branch

\_\_\_\_\_ Toxicology Branch

## 1.0 INTRODUCTION

In December 1987 the Agency issued a Data Call In Notice (DCI) requiring exposure data for several uses of propoxur. Propoxur is an organophosphate insecticide with a number of indoor and outdoor uses around occupied structures in addition to agricultural formulations. Mobay Corporation responded to the DCI with a package containing protocols for seven exposure studies addressing use of products containing this compound (Accession Nos. 219810-219819). This review addresses a protocol for a study to determine the potential respiratory exposure from indoor pest strips.

## 2.0 DESCRIPTION OF STUDY

Pest control strips containing propoxur will be placed in rooms according to the label instructions. The room will be ventilated as required by the label. Airborne propoxur concentrations will be determined by drawing air through filters using calibrated personal sampling pumps. Duplicate samples will be collected approximately five feet from the strip. Three to five replicate sets of samples are proposed. The proposed sampling intervals are:


- 1) Prior to application
- 2) Immediately after hanging the strip
- 3) 24 hours after application
- 4) 48 hours after application
- 5) 4 days after application
- 6) 7 days after application
- 7) 14 days after application
- 8) 21 days after application
- 9) 28 days after application

The filter material and the actual extraction/analytical procedures were not described. Air sampling media will be stored on dry ice prior to analysis. Fortified filters will be used to determine the extraction efficiency. Trapping efficiency of the system will be determined by drawing an appropriate volume of air, at the same rate as the proposed sampling rate, through fortified filters. Both blank and fortified samples will be prepared daily and stored with the study samples to determine whether any breakdown of the compound has occurred. Storage stability samples, covering the expected period between sampling and analysis, are also included in the study design.

## 3.0 CONCLUSIONS

EAB finds the study protocol to be acceptable. Care must be taken to assure that the study room does not have an excessive air exchange rate and that it adequately represents a typical room found in an occupied structure. The registrant proposes that three to five replicates be

collected. Three replicates is a very small sample size and it is recommended that at least five replicates be included in the study. EAB emphasizes that strict quality assurance procedures must be followed throughout the study and that the analytical methodology must be adequately documented.



David Jaquith  
Special Review Section 2  
Exposure Assessment Branch  
Hazard Evaluation Division (TS-769C)