Shaugh. No. 128701 Duplicate

EFB Log Out Date: 6/4/84

Init.:

To: Richard Mountfort
Product Manager 23
Registration Division (TS-767)

From: Joe Reinert
Chief, Environmental Chemistry Review Section #2
Exposure Assessment Branch, HED (TS-769)

Attached, please find the environmental fate review of:

Reg./File No.: 8340-EUP-7

Chemical: HOE 33171

Type Product: H

Product Name: Whip 1 EC

Company Name: American Hoechst

Submission Purposes: Protocol for Human Exposure Study

ZBB Code: Action Code: 450

Date In: 5/22/84 EFB#: 4377

Date Completed: TAIS (Level II) Days

61 2

Deferrals To:

_____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

PROPRIETARY

Review of Protocol for Assessing Exposure to Workers Applying HOE-33171 (Whip) to Soybeans with Ground Boom Equipment

As you requested, I have reviewed the subject protocol from American Hoecht for conformance with our view of what a exposure study should contain and how it should be done. Below are my comments on the protocol keyed to the sections of the documents:

Reference	Comment
1. p.1, introduction	The stuctural formula for Whip should be included.
2. "	What is the percent (w/w) of Whip in the final mixture?
3. "	What is the concentration (w/w) of Whip in the EC concentrate?
4. "	What protective clothing requirments will the label contain; gloves, coveralls, hat, etc?
5. p. 2-4	Dosimeter and pad placement (see below)

Because this protocol proposes a relatively new approach to pad construction, a discussion is in order. The idea of having a multi-layer pad is new. There is no reason such an idea would not work, but the following points need to be considered if it is used:

a. The external pad for the forearms should not be of "warm weather" material because such material would not be worn in actual summer use. T-shirt material (100% cotton) as described would be more appropriate for the chest, back, and upper body. The same applies to thigh/ankle pads if shorts are normally worn.

b. The foil-faced pads (described on line 5, p. 4) do not seem to make sense. Does the study propose to measure residues from foil as the outer layer? For chest and thigh placements, cotton material should be used.

c. The important point in the pad construction is what the typical applicator would wear during mixing and application. The use of heavy cotton for forearm/wrist pads is inappropriate. Since application is during the summer, lighter material e.g. T-shirt cotton is more appropriate.

d. Is it anticipated the same clothing will be worn for mixing/loading and application? If so, the same materials should be used.

p.4, middle para.	The air flow rate of 1 L/min may not be high enough. If the breathing rate is 1.2 m^3/hr (1200 L/hr), then a more appropriate rate would be 20 liters/min. The rate can be less, but only if the samples do not result in an undetectible residue.
p.6 Sampling Strategy	The scheme of sampling is confusing. The following should be addressed or modified.

a. Is it proposed to measure pesticide residues separately for the two tasks of mixing/loading and application? Is this what is meant by "partial periods?"

b. Rinsing hands at separate times is inappropriate. It is better to rinse both hands so they can be averaged. Also, there may be a tendency to transfer residues from one hand to the other.

c. In the table on p. 7, does this apply to one applicator or three applicators. There should be a least three different applicators (or more); hence triple the number of samples listed.

d. The use of a disposable rubber glove should not infringe upon the other data to measure hand exposure during the test; that is, its use should be a separate experiment.

e. For this whole sampling strategy, it should be written clearer; it is somewhat confusing, perhaps a table or matrix would be helpful.

II D, p. 8-10 Analytical/Storage, etc. No comment.

II.E Field Procedures — The following information should be included:

a. Expected number of applications/season.
b. Time spent mixing/load or per day.
c. Estimate of loads/day.
d. Time spent during application/day.
e. Typical number of days/year spent in application, including mix/loading
f. What does a typical applicator wear for boom application of a pesticide.

For further reference on setting up an applicator exposure study, the following publication should be consulted:

Davis, J.E., Minimizing Occupational Exposure to Pesticides Personal Monitoring. Residue Reviews, Vol.75, p.34, 1980.

Summary

The above concerns need to be addressed and resolved before the study commences. Please let me know if you have any questions.

cc: J. Heckman
Section 2 File

Fenoxaprop-ethyl scientific reviews

Page _____ is not included in this copy.

Pages 5 through 15 are not included in this copy.

The material not included contains the following type of information:

___ Identity of product inert ingredients

___ Identity of product impurities

___ Description of the product manufacturing process

___ Description of product quality control procedures

___ Identity of the source of product ingredients

X Sales or other commercial/financial information

X A draft product label

___ The product confidential statement of formula

___ Information about a pending registration action

___ FIFRA registration data

___ The document is a duplicate of page(s) _____

___ The document is not responsive to the request

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.
