US EPA ARCHIVE DOCUMENT

Shaughnessy No.: 063501

Date Out of EAB: JUL 29 1988

TO: Dennis Edwards, PM-12
Registration Division (TS-767C)

FROM: Emil Regelman, Supervisory Chemist
Environmental Chemistry Review Section 3
Exposure Assessment Branch
Hazard Evaluation Division (TS-769C)

THRU: Paul F. Schuda, Chief
Exposure Assessment Branch/HED (TS-769C)

Attached, please find the EAB review of...

Reg./File #: 239-1736

Chemical Name: Petroleum Oil

Type Product: Insecticide/Miticide/Herbicide

Product Name: VOLCK Supreme Spray

Company Name: Chevron Chemical Co.

Purpose: Label amendment to include apples, pears, papaya, passion fruit, macademia nuts, guava, mixed fruit crops, corn, strawberries, grapefruit, lemons, valencia oranges, almonds walnuts and olives.

Date Received: 5/16/88 Action Code: 310

Date Completed: 7/28/88 EAB # (s): 80756

Monitoring Study Requested: _____ Total Reviewing time: 1.5 days

Monitoring Study Volunteered: _____

Deferrals to: _____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

I. CHEMICAL:

Common name: Petroleum Oil; white oils (refined grades)

Chemical name: Petroleum Oil

Trade name: VOLCK Supreme Spray

Structure: not applicable

Physical/Chemical properties:

Empirical formula: n/a
Molecular weight: n/a
Physical state: liquid
Melting point: n/a
Solubility: n/a
Stability: n/a

II. STUDY/ACTION TYPE: label amendment to include various fruit and nuts: apples, pears, papaya, passion fruit, macademia nuts, guava, mixed fruit crops, corn, strawberries, grapefruit, lemons, valencia oranges, almonds walnuts and olives.

III. STUDY CITATIONS: no studies are associated with this review.

IV. REVIEWED BY:

A. Reiter, Chemist
Environmental Chemistry Review Section 3
EAB/HED/OPP
Date: July 28, 1988

APPROVED BY:

Emil Regelman, Supervisory Chemist
Environmental Chemistry Review Section 3
EAB/HED/OPP
Date: JUL 29 1988

VI. CONCLUSIONS:

EAB has no environmental fate or product chemistry information on petroleum oils to make an assessment. It is noted from the label that Volck Supreme Spray possesses a sulfonation value of 99% indicating that it is a highly refined petroleum oil. An environmental fate corollary may be drawn with the Coal Tar Registration Standard. Since all the environmental fate requirements (based upon terrestrial food crop use) were reserved for the relatively toxic and complex coal tars, EAB believes that the highly refined and relatively non-toxic petroleum oils should be handled in the same manner.

Since the tank mixed chemicals are already registered and have tolerances on the crops proposed for use with petroleum oils, EAB has no concern with this aspect of the proposed amendment.

VII. RECOMMENDATIONS:

EAB concurs with the label amendment request.

EAB recommends that the proposed amended use directions be revised to make them more intelligible.

VIII. BACKGROUND

A. Introduction

EAB has sparse information on petroleum oils. According to the Farm Chemicals Handbook, they are used as (1) contact dormant insecticidal sprays, (2) summer oils against aphids, mites and scale crawlers, (3) livestock parasiticides, (4) pesticide carriers, (5) contact herbicides (including Stoddard solvent and diesel oil), and, (6) fungicidal adjuvants.

B. Directions for Use

The reviewer finds the submitted amended label use directions very confusing. Basically the Volck Supreme Spray petroleum oil (can be applied by either ground or air, either diluted or as a Concentrate. The maximum diluted concentration is 15%. The maximum application rate for the Volck Concentrate formulation is 6 gal/A.

Two tank mix applications are included in amended label request. For post-emergence weed control on corn a maximum 15% solution (aerial application) or 3% solution (ground application) may be tank mixed with up to 2 1/2 lb of Attrex 80W (atrazine) per acre. For strawberries as a dormant insecticidal spray, a 1% petroleum oil solution may include 1 pt. of Dibrom 8 Emulsive per acre; a maximum of 200 gal spray mix per acre is to be applied for full coverage.

IX. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: none included with this submission.

X. COMPLETION OF ONE-LINER: no new information included with this submission.

XI. CBI APPENDIX: not applicable.