US EPA ARCHIVE DOCUMENT

111601

Date Out: EFB: APR 23 1981

To: Product Manager 23 Mountfort
TS-767

From: Dr. Willa Garner
Chief, Review Section No. 1
EnvironmentalFate Branch

Attached please find the environmental fate review of:

Reg./File No: 707-145

Chemical: Oxyfluorfen

Type Product: Herbicide

Product Name: Goal

Company Name: Rohm and Haas

Submission Purpose: Review of data supporting partition coefficient for Goal.

ZBB Code: Other

ACTION CODE: 435

Date Completed: 2/3/81

EFB # 760

Date Completed: APR 23 1981

TAIS (level II)	Days
67	2

Deferrals To:

_____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

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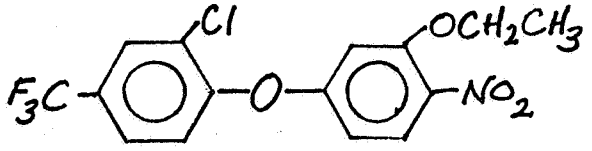
1.0 Introduction

Rohm and Haas Co. has submitted data on the octanol-water partition coefficient of oxyfluorfen (Goal).

Oxyflourfen = Goal; 2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-trifluoromethyl benzene; RH-2915



2.0 Discussion of Data "Partition Coefficient of RH-2915," T.A. Garstka, Dec. 2, 1976, Report No. 34H-76-25, Rohm and Haas Co., Philadelphia, PA., Accession No. 244078

Note: Strictly speaking, review of this data is the purview of Product Chemistry. The study is reviewed here for its informational content.

Experimental Procedures

A 54 ppm solution of ^{14}C-RH-2915 in octanol was equilibrated with an equal volume of water, centrifuged, and both layers were assayed by liquid scintillation counting.

Results

On octanol: water partition coefficient of 2.94×10^4 was obtained (average of two determinations).

3.0 Recommendations

1. This appears to be a valid study which satisfies EFB needs for data of this type.

2. The octanol: water partition coefficient of 2.94×10^4 is sufficiently large to predict that oxyflourfen has a propensity for adsorption to various organic substrates, and for accumulation in biological systems.

Henry Appleton

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