[redacted] (19)

✓ 6611

PROPRIETARY

TOX

Date Out: EFB: Feb 27 1981

To: Product Manager 25 Taylor
TS-769

From Dr. Willer Garner
Chief, Review Section No. 1
Environmental Fate Branch

SIC /fst

Attached please find the environmental fate review of:

Reg./File No.: 524-308

Chemical: [redacted]

INERT INGREDIENT INFORMATION DELETED

Type Product: H

Product Name: Roundup

Company Name: Monsanto

Submission Purpose: follow-up to meeting on EEC calculations

ZBB Code: Other

Date in: 2/25/81

Date Completed: FEB 27 1981

Deferrals To:

_____ Ecological Branch

_____ Residue Chemistry

_____ Toxicology Branch

ACTION CODE: 311, 336

EFB # 773, 774

TAIS (level II)	Days
67	1

Introduction

EFB and EEB personnel met with Monsanto representatives on 2/23/81 to discuss EEC calculations for [redacted]A Surfactant (in Roundup). At that meeting the registrant indicated that the surfactant binds strongly to soil (the calculations assumed the opposite since the surfactant is miscible with water) and that Kd values could be gleaned from the sterile controls data in the soil metabolism study (Acc. no. 093850). It was agreed that the data in that study would be looked at and, if warranted, the EECs would be recalculated.

Comments

The data in the soil metabolism study would of course not satisfy the soil adsorption/desorption data requirement for active ingredients. However, the data do suport Mansanto's contention that the surfactant binds strongly to soil. Pseudo Kd values were determined from a mathematical manipulation of the data on p. 32. They were

Ray soil (1% OM)	57
Norfolk soil (6% OM)	34
Drummer soil (1% OM)	87
	(Ave. = 59)

It is clear that the soil binding in this case is not related to partitioning into the organic matter (as was claimed in the report discussion) and that the surfactant binds strongly to soil. All past EEC calculations for [redacted]A surfactant must be redone . EEB was so notified.

• INERT INGREDIENT INFORMATION Deleted

Joe C. Reinert, Ph.D.
Review Section No. 1
Environmental Fate Branch
Hazard Evaluation Division

Joe C. Reinert

CFR-180.364 Glyphosate Roundup 11/7/79

File last updated 11/7/79

ACCEPTABLE DAILY INTAKE DATA

RAT,Older NOEL		S.F.	ADI	MPI
mg/kg	ppm		mg/kg/day	mg/day/60kg
5.000	100.00	100	0.0500	3.0000

Published Tolerances

CROP	Tolerance	Food Factor	mg/day/1.5kg
Grain Crops(64)	0.100	13.79	0.02069
Avocados(6)	0.200	0.03	0.00009
Citrus Fruits(33)	0.200	3.81	0.01144
Coffee(36)	1.000	0.75	0.01119
Cottonseed(41)	0.000	0.15	0.01350
Grapes, inc raisins(66)	0.100	0.49	0.00074
Leafy Vegetables(80)	0.200	2.76	0.00828
Molasses(96)	2.000	0.03	0.00092
Nuts(101)	0.200	0.10	0.00031
Pome Fruits(126)	0.200	2.79	0.00837
Root Crop Veg(138)	0.200	11.00	0.03299
Seed&Pod Veg(143)	0.200	3.66	0.01098
Soybeans(148)	6.000	0.92	0.08263
Palm Oil(202)	0.100	0.03	0.00005
Kidney(203)	0.100	0.03	0.00005
Pistachio nuts(210)	0.200	0.03	0.00009
Liver(211)	0.100	0.03	0.00005
Sugar,cane&beet(154)	0.100	3.64	0.00546

MPI	THRC	% ADI
3.0000 mg/day/60kg	0.2078 mg/day/1.5kg	6.93

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Unpublished,Tox Approved 8E2122,9H5196,9F2223,9F2162

CROP	Tolerance	Food Factor	mg/day/1.5kg
Sugar,cane&beet(154)	1.900	3.64	0.10369
Molasses(96)	18.000	0.03	0.00828
Bananas(7)	0.200	1.42	0.00426
Olives(104)	0.100	0.06	0.00009
Stone Fruits(151)	0.200	1.25	0.00374

MPI	THRC	% ADI
3.0000 mg/day/60kg	0.3279 mg/day/1.5kg	10.93

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Current Action 9F2163,9H5204

CROP	Tolerance	Food Factor	mg/day/1.5kg
Cucurbits(49)	0.100	2.84	0.00426
Fruiting Vegetables(60)	0.100	2.99	0.00449
Small fruit,berries(146)	0.100	0.83	0.00124
Hops(73)	0.100	0.03	0.00005
Fish,shellfish(59)	2.000	1.08	0.03250
Potable water(198)	0.100	133.33	0.20000

	THRC	% ADI
3.0000 mg/day/60kg	0.5704 mg/day/1.5kg	19.01