



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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Caswell
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MEMORANDUM

APR 5 1983

TO: Don Stubbs (41)
Registration Division (TS-767)

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

THRU: Orville E. Paynter, Ph.D.
Chief, Toxicology Branch
Hazard Evaluation Division (TS-769)

SUBJECT: 83-CA-38 - The California Department of Food and
Agriculture request a Section 18 exemption to use the
pesticide chemical triforine on almonds for the control
of benomyl resistant brown rot.

Recommendation:

Toxicology Branch cannot envision any overt hazard associated
with the implementation of this action request.

Proposed Program:

Product: Funginex 1.6 EC Reg. No. 21137-4-AA-279

Location: Almond growing areas statewide.

Commodity: Almonds

Dosage: 36 to 48 ounces of formulation per acre.

Stated Dilution Rate: Apply with 50 to 200 gallons of water per
acre by ground or with a minimum of 20 gallons of water per acre
by air.

Frequency: Two applications during blossom period.

Reentry Interval: 24 hours

Preharvest Interval: None

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Starting Date: February 27, 1983

Expiration Date: March 15, 1983

Other Requirements: This treatment limited to confirmed cases of benomyl resistant brown rot.

Residue levels will be 0.02 ppm in almonds and will not exceed 0.01 ppm in milk, meat, fat and meat byproducts, of cattle, goats, hogs, horses and sheep. (Oral communication from Dr. Robert Hummel, RCB; 3/29/83.)

Toxicity Data Base:

- 1) Acute Oral LD₅₀ - Rat (Funginex EC)
LD₅₀ - Males = 5.7 (4.0-8.2) gm/kg
Toxicity Category - III
Study Classification - Core-Guidelines
- 2) Acute Dermal LD₅₀ - Rabbit (Funginex EC)
Male rabbit, LD₅₀ = > 5 gm/kg
Toxicity Category - IV
Study Classification - Core-Minimum
- 3) Primary Eye Irritation - Rabbit (Funginex EC)
Complete corneal opacity and pannus.
Toxicity Category - I
Study Classification - Core-Minimum
- 4) Primary Skin Irritation - Rabbit (Funginex EC)
PIS = 5.5/8.0
Toxicity Category - I
Study Classification - Core-Minimum
- 5) Acute Inhalation LC₅₀ (21-days) Rat (Funginex EC)
LC₅₀ = > 37.8 mg/kg
Toxicity Category - IV
Study Classification - Core-Minimum
- 6) Teratology - Rat (Technical)
Not teratogenic at 1600 ppm (EDT)
Fetotoxic NOEL = 400 ppm - should be 500 mg/kg
Possible fetotoxic effects at 800 and 1600 ppm.
Study Classification - Core-Minimum

*I believe 21 days results
should be mg/kg
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- 7) Teratology - Rabbit (Technical)
Not teratogenic at 125 mg/kg (HDT)
Maternal NOEL = 5 mg/kg
Maternal LEL = 25 mg/kg (reduced food intake and body weight loss)
Fetotoxic NOEL = 5 mg/kg
Fetotoxic LEL = 25 mg/kg
(decreased mean relative weight)
Study Classification - Core-Minimum
- 8) 18-Month Feeding Study - Mouse (Technical)
Negative for oncogenicity at 750 ppm (HDT)
Study Classification - Core-Guidelines
- 9) 2-Year Feeding Study - Dog (Technical)
NOEL = 100 ppm (HDT 1000 ppm)
Study Classification - Core-Minimum
- 10) 2-Year Feeding Study - Rat (Technical)
NOEL = 625 ppm - No oncogenic effects at 3125 ppm (HDT)

No existing regulatory actions against registration have been noted.

The effects of this action on the TMRC and percents of the ADI utilized are noted in the enclosed computer printout.

C. Frick 3/31/83
Charles Frick, DABFT
Review Section V
Toxicology Branch/HED

JPC
4/1/83
WJN 4/1/83
(TS-769)

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File last updated 1/25/83

ACCEPTABLE DAILY INTAKE DATA

Dog	NOEL	S.F.	ADI	MPI
mg/kg	ppm		mg/kg/day	mg/day (60kg)
2.500	100.00	100	0.0250	1.5000

Published Tolerances

CROP	Tolerance	Food Factor	mg/day (1.5kg)
Cranberries (44)	0.100	0.03	0.00005
Blueberries (18)	0.100	0.03	0.00005
Peaches (114)	8.000	0.90	0.10792
Nectarines (100)	8.000	0.03	0.00360
Apricots (3)	8.000	0.11	0.01349
Cherries (30)	3.000	0.10	0.00460
Plums, not prunes (124)	3.000	0.09	0.00414
Prunes (130)	3.000	0.04	0.00184
Peppers (120)	5.000	0.12	0.00920
Eggplant (53)	1.000	0.03	0.00045
Strawberries (152)	2.000	0.18	0.00552
Cucumbers, inc pickl (46)	0.500	0.73	0.00544
Cantaloupe (23)	1.000	0.52	0.00782
Watermelon (169)	1.000	1.43	0.02146
Apples (2)	0.010	2.53	0.00038

MPI	TMRC	% ADI
1.5000 mg/day (60kg)	0.1859 mg/day (1.5kg)	12.40

Unpublished, Tox Approved 272590

CROP	Tolerance	Food Factor	mg/day (1.5kg)
Almonds (1)	0.010	0.03	0.00000

MPI	TMRC	% ADI
1.5000 mg/day (60kg)	0.1859 mg/day (1.5kg)	12.40

Current Action Section 18 [83-CA-38]

CROP	Tolerance	Food Factor	mg/day (1.5kg)
Almonds (1)	0.010	0.03	0.00000
Milk&Dairy Products (93)	0.010	28.62	0.00429
Cattle (26)	0.010	7.18	0.00108
Goats (62)	0.010	0.03	0.00000
Hogs (69)	0.010	3.43	0.00052
Horses (208)	0.010	0.03	0.00000
Sheep (145)	0.010	0.19	0.00003

MPI	TMRC	% ADI
1.5000 mg/day (60kg)	0.1919 mg/day (1.5kg)	12.79

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