

US EPA ARCHIVE DOCUMENT



13544

043854

Chemical:

PC Code:

HED File Code

Memo Date: 12/14/82

File ID: 00000000

Accession Number: 000-05-0051

HED Records Reference Center
07/26/2002

HEALTH EFFECTS DIVISION
SCIENTIFIC REVIEWS
EPA REG. DIV. 881
Technology Branch/HED Review

CASWELL FILE

14

To: William Miller, PM #16, Registration Division (TS-767)

Registration No(s):: None

Pesticide Petition No(s):: 2F2716/2H5359

Caswell No(s): 454 B

Chemical(s): Dyfonate (fonofos)

(Registration Standard Chemical)

RAC(s) - tolerance(s): Increase existing tolerance for whole potatoes from 0.1 ppm to 0.2 ppm. Establish food additive regulation for potato waste (peels) at 3.0 ppm.

Inert(s) cleared 180.1001: None

% of ADI occupied: Existing: None Resulting: None

Resulting % increase in TMRC: 19.6%

Attached (?): ADI printout: YES/NO; TOX "one-liner": YES/NO; DER: YES/NO

Existing regulatory actions against registration: None

RPAR status: Not in RPAR

New Data: None

Data considered in setting the ADI: None

Data gaps: mouse onco study, teratology study (ies)

Recommendation: TB has no objection to raising the tolerance for whole potatoes from 0.1 ppm to 0.2 ppm on the basis of this increase representing (see next page)

Comments: Please note RCB objections to these petitions. (M-Nelson, 9/15/82, attached).

Reviewer: Edwin R. Budd

Date: 12/13/82

Section Head: Edwin R. Budd

12/14/82

CFR 100.221

Lyfonate

12/13/82

Unverified Printout

ACCEPTABLE DAILY INTAKE DATA

	NOEL	S.F.	ADI	MPI
mg/kg	ppm		mg/kg/day	mg/day (60kg)
\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$	\$\$\$	\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$

Published Tolerances

CROP	Tolerance	Food Factor	mg/day(1.5kg)
Asparagus(5)	0.500	0.14	0.00107
Corn, all types(38)	0.100	2.51	0.00377
Fruiting Vegetables(60)	0.100	2.99	0.00449
Leafy Vegetables(80)	0.100	2.76	0.00414
Mint(193)	0.100	0.03	0.00005
Peanuts(115)	0.100	0.36	0.00054
Root Crop Veg(138)*	0.100	11.00	0.01649
Seed&Pod Veg(143)	0.100	3.66	0.00549
Sorghum(147)	0.100	0.03	0.00005
Strawberries(152)	0.100	0.18	0.00028
Sugar, cane&beet(154)	0.100	3.64	0.00546

MPI	TMRC	% ADI
\$\$\$\$\$\$\$\$ mg/day(60kg)	0.0418 mg/day(1.5kg)	0.00

Current Action 2F2716

CROP	Tolerance	Food Factor	mg/day(1.5kg)
Potatoes(127)	0.100	5.43	0.00814

MPI	TMRC	% ADI
\$\$\$\$\$\$\$\$ mg/day(60kg)	0.0500 mg/day(1.5kg)	0.00

$$\text{increase in TMRC} = \frac{(0.0500 - 0.0418)}{0.0418} \times 100 = \underline{19.6\%}$$

DE GUIGNÉ
TECHNICAL CENTER
ENVIRONMENTAL SERVICES



Stauffer Chemical Company

1200 S. 47th St. / Richmond, CA 94804 / Tel. (415) 231-1000 / TWX (910) 382-8174

June 25, 1982

Mr. William H. Miller
Product Manager (16)
Insecticide-Rodenticide Branch
Registration Division (TS-767)
Environmental Protection Agency
401 M Street, S. W.
Washington, D. C. 20460

Subject: DYFONATE® Insecticide/Potatoes
Pesticide Petition to Amend
Tolerance and Establish Food Additive Tolerance

Dear Mr. Miller:

The undersigned, Stauffer Chemical Company herewith submits three copies of a Pesticide Petition proposing that 40 CFR 180.221 be amended by the establishment of a 0.2 parts per million tolerance for the combined residues of the insecticide DYFONATE, O-ethyl S-phenyl ethylphosphonodithioate, and its oxygen analog, O-ethyl S-phenyl ethylphosphothioate in or on potatoes.

We also propose that the following Food Additive tolerance be established: 3.0 parts per million for the combined residues of the insecticide DYFONATE, O-ethyl S-phenyl ethylphosphonodithioate and its oxygen analog, O-ethyl S-phenyl ethylphosphothioate in potato waste (peels).

P 3
DYFONATE is currently registered for use on potatoes. The existing tolerance of 0.1 ppm (negligible residue) has been adequate to cover residues resulting from the use of DYFONATE on potatoes when used according to labeled rates and proper timing of application. Residue studies conducted during the 1980 growing season (Appendix D) have indicated that under certain circumstances, applications of DYFONATE may result in residues exceeding the 0.1 ppm tolerance on potatoes. It is our opinion that changing cultural practice and varying climatic conditions are responsible for these residues. Therefore, we request that the 0.1 ppm tolerance be revised upward to 0.2 ppm on the RAC, potatoes.

P 4
Potato processors have recently begun the practice of feeding potato peelings to livestock (blended in equal parts with silage and/or grain). Since results of field trials indicate that DYFONATE residues are greater in the potato peel, we are requesting the establishment of the 3.0 ppm Food Additive tolerance on potato waste (peels). Results of a lactating dairy cattle study supporting the proposed tolerances may be found in P.P. No. 3F1379. In this study,

Mr. William H. Miller
June 25, 1982
Page 2

DYFONATE was fed to lactating dairy cattle at total dietary concentrations of 0.1, 0.5 and 1.0 ppm.

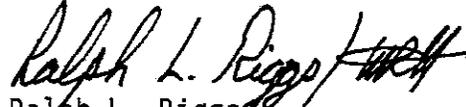
Until the proposed tolerances have been established, over-tolerance potatoes must be stored while the residues degrade to acceptable limits. Since this could pose great economic hardship on the potato growers and processors, we request that this petition be given an expeditious review.

Accompanying the petition, attached please find a check in the amount of \$2,000 to cover fees associated with this submission as required by 40 CFR 180.33.

If you have any questions regarding this petition, please contact us by telephone at (415) 231-1177.

Sincerely,

STAUFFER CHEMICAL COMPANY



Ralph L. Riggs
Senior Regulatory Affairs
Supervisor

MSO/cmb

Rec'd EPA
6/28/82