

US EPA ARCHIVE DOCUMENT

9-3-96

059201



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

OFFICE OF
PREVENTION, PESTICIDES, AND
TOXIC SUBSTANCES

SEP - 3 1996

MEMORANDUM

SUBJECT: Dietary Exposure Analysis for Synar List Chemical
(Phosmet).

FROM: Brian Steinwand *BJ*
Dietary Risk Evaluation Section
Science Analysis Branch/HED (7509C)

Through: Elizabeth Doyle, Section Head *E.A. Doyle*
Dietary Risk Evaluation Section
SAB/Health Effects Division

TO: Jack Housenger, Chief
SRB (7508W)

Action Requested

Provide a chronic dietary exposure analysis for Phosmet using percent crop treated information supplied by BEAD and anticipated residue information supplied by Chemistry Branch II.

Background

Phosmet has been shown through several screening processes to be an RfD exceeder. For the purposes of this analysis, percent crop treated information and anticipated residue data were supplied and utilized in order to present a more accurate estimate of dietary risk from the uses of phosmet.

This analysis does not include the use of phosmet on corn and citrus. Previous analyses have shown citrus to exceed the RfD at 250%. As these commodities had not been on any end-use labels in years, the registrant did not support their reregistration. However, the IR-4 responded to a recent 6f notice by saying that they might want to support the use on citrus. As such, the registrant (Gowan) has rescinded the use deletion on citrus.

1/12

The percent crop treated data were supplied by EAB/BEAD (See memo, D. Hrdy, 8/1/96). Anticipated residue data (See memo, D. Hrdy, 8/1/96) used in this analysis were determined using field trial data submitted to support registration and monitoring data from USDA-PDP. FDA Surveillance monitoring data and State monitoring program data were also used.

Incorporating the percent crop treated and anticipated residue data into the dietary risk analysis brings all subgroups below the Agency's level of concern. The %RfD used for the general U.S. Population is 15.3, while the highest subgroup is Non-Nursing Infants (< 1 year old) at 58.4 %RfD. Thus, there is no chronic dietary concern for the published uses of phosmet.

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	UF		
Phosmet (imidan) Caswell #543 CAS No. 732-11-6 A.I. CODE: 059201 CFR No. 180.261 185.3950	2yr feeding- rat NOEL= 1.1000 mg/kg 20.00 ppm LEL= 1.8000 mg/kg 40.00 ppm ONCO: Tentative C (HED)	RBC & serum ChE inhibit- ion. Evidence of carcinogenic- ity in mice (liver); negative in rat.	OPP Rfd= 0.010000 EPA Rfd= 0.020000	-->100	No data gaps. Registration Std. 9/86.	WHO reviewed 1979 EPA verified 06/10/86 HED reviewed 10/21/86 HED reviewed 03/04/88 Rfd/PR reviewed 03/03/94 On IRIS

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
01009AA	BLUEBERRIES	10 RAW-FRESH OR NFS.	4F1464	P 10.00000	4.500000		8.00	0.360000
01009AA	BLUEBERRIES	21 COOKED-NFS	4F1464	P 10.00000	4.500000		8.00	0.360000
01009AA	BLUEBERRIES	22 COOKED-FRESH-BAKED	4F1464	P 10.00000	4.500000		8.00	0.360000
01009AA	BLUEBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	4F1464	P 10.00000	4.500000		100.00	10.000000
01010AA	CRANBERRIES	10 RAW-FRESH OR NFS	4F1464	P 10.00000	10.000000		100.00	10.000000
01010AA	CRANBERRIES	21 COOKED-NFS	4F1464	P 10.00000	10.000000		100.00	10.000000
01010AA	CRANBERRIES	31 COOKED-FRESH OR CANNED	4F1464	P 10.00000	10.000000		100.00	10.000000
01010AA	CRANBERRIES	15 RAW-FRESH OR CANNED	4F1464	P 10.00000	10.000000		100.00	10.000000
01010AA	CRANBERRY-JUICE	31 COOKED-FRESH OR CANNED	4F1464	P 10.00000	10.000000		100.00	10.000000
01010AA	CRANBERRY-JUICE	10 RAW-FRESH OR NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-FRESH	21 COOKED-NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-FRESH	31 COOKED-FRESH OR CANNED	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-FRESH	10 RAW-FRESH OR NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-RAISINS	21 COOKED-NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-RAISINS	22 COOKED-FRESH-BAKED	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-RAISINS	10 RAW-FRESH OR NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-RAISINS	15 RAW-FRESH OR CANNED	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-JUICE	21 COOKED-NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
01014AA	GRAPES-JUICE	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		5.00	0.002500
03001AA	ALMONDS	21 COOKED-NFS	4F1464	P 0.100000	0.050000		5.00	0.002500
03001AA	ALMONDS	22 COOKED-FRESH-BAKED	4F1464	P 0.100000	0.050000		5.00	0.002500
03002AA	BRAZIL NUTS	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03002AA	BRAZIL NUTS	21 COOKED-NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03003AA	CASHEWS	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03003AA	CASHEWS	21 COOKED-NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03004AA	CHESTNUTS	21 COOKED-NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03005AA	FILBERTS	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03005AA	FILBERTS	21 COOKED-NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03005AA	FILBERTS	22 COOKED-FRESH-BAKED	4F1464	P 0.100000	0.050000		100.00	0.050000
03006AA	HICKORY NUTS	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03007AA	MACADAMIA NUTS	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03008AA	PECANS	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03008AA	PECANS	21 COOKED-NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03008AA	PECANS	22 COOKED-FRESH-BAKED	4F1464	P 0.100000	0.050000		100.00	0.050000
03008AA	PECANS	23 COOKED-FRESH-BOILED	4F1464	P 0.100000	0.050000		100.00	0.050000
03008AA	PECANS	62 COOKED-FRESH OR FROZEN-BAKED	4F1464	P 0.100000	0.050000		100.00	0.050000
03009AA	WALNUTS	10 RAW-FRESH OR NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03009AA	WALNUTS	21 COOKED-NFS	4F1464	P 0.100000	0.050000		100.00	0.050000
03009AA	WALNUTS	22 COOKED-FRESH-BAKED	4F1464	P 0.100000	0.050000		100.00	0.050000
03010AA	BUTTER NUTS	00 NOT SPECIFIED (NO CONSUMPTION)	4F1464	P 0.100000	0.050000		100.00	0.050000

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Phosmet (Imidan) Caswell #543 CAS No. 732-11-6 A.I. CODE: 059201 CPR No. 180.261 185.3950	2yr feeding- rat NOEL= 1,1000 mg/kg 20.00 ppm LEL= 1,8000 mg/kg 40.00 ppm ONCO: Tentative C (HED)	RBC & serum Che inhibit- ion. Evidence of carcinogenic- ity in mice (Liver); negative in rat.	ADI UF -->100 OPP Rfd= 0.010000 EPA Rfd= 0.020000	No data gaps. Registration Std. 9/86.	WHO reviewed 1979 EPA verified 06/10/86 HED reviewed 10/21/86 HED reviewed 03/04/88 Rfd/PR reviewed 03/03/94 On IRIS

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
03011AA	PISTACHIO NUTS	10 RAW-FRESH OR NFS	6E3425	P 0.100000	0.050000		100.00	0.050000
03013AA	BEECHNUTS	00 NOT SPECIFIED (NO CONSUMPTION)	4F1464	P 0.100000	0.050000		100.00	0.050000
04001AA	APPLES-FRESH	10 RAW-FRESH OR NFS	8F0699	P 10.00000	0.030000		100.00	0.030000
04001AA	APPLES-FRESH	21 COOKED-NFS	8F0699	P 10.00000	0.030000		100.00	0.030000
04001AA	APPLES-FRESH	31 COOKED-FRESH OR CANNED	8F0699	P 10.00000	0.030000		100.00	0.030000
04001AA	APPLES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	8F0699	P 10.00000	0.030000		100.00	0.030000
04001DA	APPLES-DRIED	10 RAW-FRESH OR NFS	8F0699	P 10.00000	0.030000		100.00	0.030000
04001DA	APPLES-DRIED	22 COOKED-FRESH-BAKED	8F0699	P 10.00000	0.030000		100.00	0.030000
04001DA	APPLES-DRIED	62 COOKED-FRESH OR FROZEN-BAKED	8F0699	P 10.00000	0.030000		100.00	0.030000
04001JA	APPLES-JUICE	15 RAW-FRESH OR CANNED	8F0699	P 10.00000	0.030000		100.00	0.030000
04001JA	APPLES-JUICE	31 COOKED-FRESH OR CANNED	8F0699	P 10.00000	0.030000		100.00	0.030000
04003AA	PEARS-FRESH	10 RAW-FRESH OR NFS	8F0699	P 10.00000	0.030000		100.00	0.030000
04003AA	PEARS-FRESH	31 COOKED-FRESH OR CANNED	8F0699	P 10.00000	0.030000		100.00	0.030000
04003AA	PEARS-FRESH	51 COOKED-CANNED	8F0699	P 10.00000	0.030000		100.00	0.030000
04003AA	PEARS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	8F0699	P 10.00000	0.030000		100.00	0.030000
04003DA	PEARS-DRIED	10 RAW-FRESH OR NFS	8F0699	P 10.00000	0.030000		100.00	0.030000
04003DA	PEARS-DRIED	21 COOKED-NFS	8F0699	P 10.00000	0.030000		100.00	0.030000
05001AA	APRICOTS-FRESH	10 RAW-FRESH OR NFS	1F1027	P 5.000000	0.096000		100.00	0.096000
05001AA	APRICOTS-FRESH	31 COOKED-NFS	1F1027	P 5.000000	0.096000		100.00	0.096000
05001AA	APRICOTS-FRESH	62 COOKED-FRESH OR CANNED	1F1027	P 5.000000	0.096000		100.00	0.096000
05001DA	APRICOTS-DRIED	10 RAW-FRESH OR NFS	1F1027	P 5.000000	0.096000		100.00	0.096000
05001DA	APRICOTS-DRIED	22 COOKED-FRESH-BAKED	1F1027	P 5.000000	0.096000		100.00	0.096000
05002AA	CHERRIES-FRESH	10 RAW-FRESH OR NFS	1F1027	P 10.00000	5.200000		41.00	2.132000
05002AA	CHERRIES-FRESH	21 COOKED-NFS	1F1027	P 10.00000	5.200000		41.00	2.132000
05002AA	CHERRIES-FRESH	31 COOKED-FRESH OR CANNED	1F1027	P 10.00000	5.200000		41.00	2.132000
05002AA	CHERRIES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	1F1027	P 10.00000	5.200000		41.00	2.132000
05002DA	CHERRIES-DRIED	00 NOT SPECIFIED (NO CONSUMPTION)	1F1027	P 10.00000	5.200000		41.00	2.132000
05002JA	CHERRIES-JUICE	15 RAW-FRESH OR CANNED	1F1027	P 10.00000	5.200000		41.00	2.132000
05002JA	CHERRIES-JUICE	21 COOKED-NFS	1F1027	P 10.00000	5.200000		41.00	2.132000
05003AA	NECTARINES	10 RAW-FRESH OR NFS	4F1464	P 5.000000	0.096000		100.00	0.096000
05004AA	PEACHES-FRESH	10 RAW-FRESH OR NFS	8F0699	P 10.00000	0.096000		100.00	0.096000
05004AA	PEACHES-FRESH	21 COOKED-NFS	8F0699	P 10.00000	0.096000		100.00	0.096000
05004AA	PEACHES-FRESH	31 COOKED-FRESH OR CANNED	8F0699	P 10.00000	0.096000		100.00	0.096000
05004AA	PEACHES-FRESH	51 COOKED-CANNED	8F0699	P 10.00000	0.096000		100.00	0.096000
05004DA	PEACHES-DRIED	10 RAW-FRESH OR NFS	8F0699	P 10.00000	0.096000		100.00	0.096000
05004DA	PEACHES-DRIED	21 COOKED-NFS	8F0699	P 10.00000	0.096000		100.00	0.096000
05005AA	PLUMS-FRESH	10 RAW-FRESH OR NFS	1F1027	P 5.000000	5.000000		23.00	1.150000
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	1F1027	P 5.000000	5.000000		23.00	1.150000
05005DA	PLUMS-PRUNES	10 RAW-FRESH OR NFS	1F1027	P 5.000000	5.000000		23.00	1.150000
05005DA	PLUMS-PRUNES	21 COOKED-NFS	1F1027	P 5.000000	5.000000		23.00	1.150000

CHEMICAL Phosmet (Imidan) Caswell #543 CAS. No. 732-11-6 A.I. CODE: 05201 CFR No. 180.261 185.3950	STUDY TYPE 2yr feeding- rat NOEL= 1,1000 mg/kg 20.00 ppm LEL= 1,8000 mg/kg 40.00 ppm ONCO: Tentative C (HED)	EFFECTS RBC & serum CHE inhibit- ion. Evidence of carcinogenic- ity in mice (liver); negative in rat.	REFERENCE DOSES ADI UF -->100 OPP Rfd= 0.010000 EPA Rfd= 0.020000	DATA GAPS/COMMENTS No data gaps. Registration Std. 9/86.	STATUS WHO reviewed 1979 EPA verified 06/10/86 HED reviewed 10/21/86 HED reviewed 03/04/88 Rfd/PR reviewed 03/03/94 On IRIS

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
05005DA	PLUMS-PRUNES	31 COOKED-FRESH OR CANNED	1F1027	P 5.000000	5.000000		23.00	1.150000
05005JA	PRUNE-JUICE	10 RAW-FRESH OR NFS	1F1027	P 5.000000	5.000000		100.00	5.000000
05005JA	PRUNE-JUICE	62 COOKED-FRESH OR FROZEN-BAKED	1F1027	P 5.000000	5.000000		100.00	5.000000
06018AA	KIWI	10 RAW-FRESH OR NFS	8E2102	P 25.00000	14.150000		14.00	1.981000
14013AA	POTATO(WH)-WHOLE	10 RAW-FRESH OR NFS	0F0978	P 0.100000	0.100000		5.00	0.005000
14013AA	POTATO(WH)-WHOLE	21 COOKED-NFS	0F0978	P 0.100000	0.100000		5.00	0.005000
14013AA	POTATO(WH)-WHOLE	22 COOKED-FRESH-BAKED	0F0978	P 0.100000	0.100000		5.00	0.005000
14013AB	POTATO(WH)-UNSP	22 COOKED-FRESH-BAKED	0F0978	P 0.100000	0.100000		5.00	0.005000
14013AC	POTATO(WH)-PULP	21 COOKED-NFS	0F0978	P 0.100000	0.100000		5.00	0.005000
14013AC	POTATO(WH)-PULP	22 COOKED-FRESH-BAKED	0F0978	P 0.100000	0.100000		5.00	0.005000
14013AC	POTATO(WH)-PULP	23 COOKED-FRESH-BOILED	0F0978	P 0.100000	0.100000		5.00	0.005000
14013AC	POTATO(WH)-PULP	25 COOKED-FRESH-FRIED	0F0978	P 0.100000	0.100000		5.00	0.005000
14013DA	POTATO(WH)-DRY	10 RAW-FRESH OR NFS	0F0978	P 0.100000	0.100000		5.00	0.005000
14013DA	POTATO(WH)-DRY	31 COOKED-FRESH OR CANNED	0F0978	P 0.100000	0.100000		5.00	0.005000
14013HA	POTATO(WH)-PEEL	22 COOKED-FRESH-BAKED	0F0978	P 0.100000	0.100000		5.00	0.005000
14018AA	SWEETPOTATOES	21 COOKED-NFS	3E1328	P 10.00000	10.000000		100.00	10.000000
14018AA	SWEETPOTATOES	31 COOKED-FRESH OR CANNED	3E1328	P 10.00000	10.000000		100.00	10.000000
14018AA	SWEETPOTATOES	51 COOKED-CANNED	3E1328	P 10.00000	10.000000		100.00	10.000000
15007AA	PEAS DRY-GARDEN	21 COOKED-NFS	4F1464	P 0.500000	0.070000		1.00	0.000700
15007AA	PEAS DRY-GARDEN	31 COOKED-FRESH OR CANNED	4F1464	P 0.500000	0.070000		1.00	0.000700
15009AA	PEAS SUCC-GARDEN	21 COOKED-NFS	4F1464	P 0.500000	0.500000		1.00	0.005000
15009AA	PEAS SUCC-GARDEN	31 COOKED-FRESH OR CANNED	4F1464	P 0.500000	0.500000		1.00	0.005000
15032AA	BEANS-DRY	21 COOKED-NFS	4F1464	P 0.500000	0.070000		1.00	0.000700
270030A	COTTONSEED-OIL	18 PROCESSED OIL	260053	P 0.200000	0.100000		1.00	0.001000
270030A	COTTONSEED-OIL	18 PROCESSED OIL	NOPE#	P 0.100000	0.100000		1.00	0.001000
43058AA	WINE AND SHERRY	10 RAW-FRESH OR NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
43058AA	WINE AND SHERRY	21 COOKED-NFS	0F0937	P 10.00000	0.030000		100.00	0.030000
53001BA	BEEF-MEAT BYP	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001BA	BEEF-MEAT BYP	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001BB	BEEF-OTH ORGAN	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001BB	BEEF-OTH ORGAN	51 COOKED-CANNED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001DA	BEEF-DRIED	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001FA	BEEF-FAT	10 RAW-FRESH OR NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001FA	BEEF-FAT	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001FA	BEEF-FAT	22 COOKED-FRESH-BAKED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001FA	BEEF-FAT	23 COOKED-FRESH-BOILED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001FA	BEEF-FAT	24 COOKED-FRESH-BROILED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001FA	BEEF-FAT	25 COOKED-FRESH-FRIED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001KA	BEEF-KIDNEY	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001LA	BEEF-LIVER	25 COOKED-FRESH-FRIED	8F0699	P 0.200000	0.200000		100.00	0.200000

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53001LA	BEEF-LIVER	31 COOKED-FRESH OR CANNED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001MA	BEEF-LEAN	10 RAW-FRESH OR NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001MA	BEEF-LEAN	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53001MA	BEEF-LEAN	22 COOKED-FRESH-BAKED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001MA	BEEF-LEAN	23 COOKED-FRESH-BOILED	8F0699	P 0.200000	0.200000		100.00	0.200000
53001MA	BEEF-LEAN	24 COOKED-FRESH-BROILED	8F0699	P 0.200000	0.200000		100.00	0.200000
53002BA	GOAT-MEAT BYP	00 NOT SPECIFIED (NO CONSUMPTION)	8F0699	P 0.200000	0.200000		100.00	0.200000
53002BB	GOAT-OTH ORGAN	00 NOT SPECIFIED (NO CONSUMPTION)	8F0699	P 0.200000	0.200000		100.00	0.200000
53002FA	GOAT-FAT	23 COOKED-FRESH-BOILED	8F0699	P 0.200000	0.200000		100.00	0.200000
53002FA	GOAT-FAT	25 COOKED-FRESH-FRIED	8F0699	P 0.200000	0.200000		100.00	0.200000
53002KA	GOAT-KIDNEY	00 NOT SPECIFIED (NO CONSUMPTION)	8F0699	P 0.200000	0.200000		100.00	0.200000
53002LA	GOAT-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	8F0699	P 0.200000	0.200000		100.00	0.200000
53002MA	GOAT-LEAN	23 COOKED-FRESH-BOILED	8F0699	P 0.200000	0.200000		100.00	0.200000
53002MA	GOAT-LEAN	25 COOKED-FRESH-FRIED	8F0699	P 0.200000	0.200000		100.00	0.200000
53003AA	HORSE	00 NOT SPECIFIED (NO CONSUMPTION)	8F0699	P 0.200000	0.200000		100.00	0.200000
53005BA	SHEEP-MEAT BYP	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53005BB	SHEEP-OTH ORGAN	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53005FA	SHEEP-FAT	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53005KA	SHEEP-KIDNEY	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53005LA	SHEEP-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	8F0699	P 0.200000	0.200000		100.00	0.200000
53005MA	SHEEP-LEAN	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53005MA	SHEEP-LEAN	31 COOKED-FRESH OR CANNED	8F0699	P 0.200000	0.200000		100.00	0.200000
53006BA	PORK-MEAT BYP	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53006BB	PORK-OTH ORGAN	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53006BB	PORK-OTH ORGAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	8F0699	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	10 RAW-FRESH OR NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	23 COOKED-FRESH-BOILED	8F0699	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	25 COOKED-FRESH-FRIED	8F0699	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	8F0699	P 0.200000	0.200000		100.00	0.200000
53006KA	PORK-KIDNEY	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53006LA	PORK-LIVER	21 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53006LA	PORK-LIVER	25 COOKED-FRESH-FRIED	8F0699	P 0.200000	0.200000		100.00	0.200000
53006MA	PORK-LEAN	25 COOKED-NFS	8F0699	P 0.200000	0.200000		100.00	0.200000
53006MA	PORK-LEAN	25 COOKED-FRESH-FRIED	8F0699	P 0.200000	0.200000		100.00	0.200000
53006MA	PORK-LEAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	8F0699	P 0.200000	0.200000		100.00	0.200000

6

CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Phosmet (Imidan) Caswell #543 CAS No. 732-11-6 A.I. CODE: 059201 CFR No. 180.261 185.3950	2yr feeding- rat NOEL= 1.1000 mg/kg LEL= 20.00 ppm 1.8000 mg/kg 40.00 ppm ONCO: Tentative C (HED)	RBC & serum ChE inhibit- ion. Evidence of carcinogenic- ity in mice (liver); negative in rat.	ADI UF -->100 OPP Rfd= 0.010000 EPA Rfd= 0.020000	No data gaps. Registration Std. 9/86.	WHO reviewed 1979 EPA verified 06/10/86 HED reviewed 10/21/86 HED reviewed 03/04/88 Rfd/PR reviewed 03/03/94 On IRIS

POPULATION SUBGROUP	TOTAL TMRC (MG/KG BODY WEIGHT/DAY)		NEW TMRC AS PERCENT OF RFD	DIFFERENCE AS PERCENT OF RFD	EFFECT OF ANTICIPATED RESIDUES	
	CURRENT TMRC*	NEW TMRC**			ARC	%RFD
U.S. POPULATION - 48 STATES	0.032036	0.032036	320.356910	0.000000	0.001539	15.386657
U.S. POPULATION - SPRING SEASON	0.029670	0.029670	296.703000	0.000000	0.001340	13.40473
U.S. POPULATION - SUMMER SEASON	0.031101	0.031101	311.010610	0.000000	0.001420	14.19789
U.S. POPULATION - FALL SEASON	0.033680	0.033680	336.804110	0.000000	0.001832	18.32432
U.S. POPULATION - WINTER SEASON	0.033668	0.033668	336.684060	0.000000	0.001562	15.62003
NORTHEAST REGION	0.038944	0.038944	389.438060	0.000000	0.001644	16.43943
NORTH CENTRAL REGION	0.031099	0.031099	310.991610	0.000000	0.001462	14.61530
SOUTHERN REGION	0.025093	0.025093	250.928890	0.000000	0.001534	15.34026
WESTERN REGION	0.036094	0.036094	360.944240	0.000000	0.001517	15.17479
HISPANICS	0.037393	0.037393	373.927160	0.000000	0.001474	14.74483
NON-HISPANIC WHITES	0.032295	0.032295	322.950420	0.000000	0.001483	14.82708
NON-HISPANIC BLACKS	0.027267	0.027267	272.669030	0.000000	0.001985	19.85038
NON-HISPANIC OTHERS	0.036491	0.036491	364.911430	0.000000	0.001053	10.53369
NURSING INFANTS (< 1 YEAR OLD)	0.104629	0.104629	1046.289010	0.000000	0.003133	31.32619
NON-NURSING INFANTS (< 1 YEAR OLD)	0.158686	0.158686	1586.855140	0.000000	0.005840	58.40157
FEMALES (13+ YEARS; PREGNANT)	0.023912	0.023912	239.118010	0.000000	0.000888	8.88245
FEMALES 13+ YEARS, NURSING	0.027839	0.027839	278.392570	0.000000	0.000829	8.29400
CHILDREN (1-6 YEARS OLD)	0.087737	0.087737	877.372110	0.000000	0.003061	30.61477
CHILDREN (7-12 YEARS OLD)	0.044913	0.044913	449.131500	0.000000	0.001764	17.63661
MALES (13-19 YEARS OLD)	0.023641	0.023641	236.410150	0.000000	0.001118	11.18065
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)	0.022896	0.022896	228.957850	0.000000	0.001113	11.12701
MALES (20 YEARS AND OLDER)	0.019181	0.019181	191.810640	0.000000	0.001258	12.58181
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)	0.022455	0.022455	224.546550	0.000000	0.001324	13.24256

*Current TMRC does not include new or pending tolerances.
**New TMRC includes new, pending, and published tolerances.

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1 DETAILED ACUTE ANALYSIS INCLUDING AR'S: ALL STATISTICS BASED ON USERS' DAILY CONSUMPTION

*NAME: PHOSMET (IMIDAN)	STUDY	RDV	NOEL	SF	STUDY TYPE	SPECIES	EFF. LEV.	CORE GRADE	DOC. NO.
CASWELL NO: 543	A	00000.0200	000040.000	000100	Chronic	Dog	Enzymatic	Minimum	0000001999
CAS NO: 00732-11-6	B	00000.4000	000040.000	000010	Chron-onco	Rat	Enzymatic	Minimum	0000001999
STATUS CODES:	C	00000.0200	000040.000	000100	Reprodctn	Rat	Systemic	Minimum	0000001999

*RDV INFO: The LD value used in this analysis is 0.1 MG/KG of BODY WEIGHT/DAY

*FILE INFO: No Tolerance Data Are Used--Without User Modifications.

AR DATA: No User Modifications

U.S. POP. - 48 STATES

ESTIMATED % OF POTENTIAL

MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY

PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY	AS PERCENT OF RDV
0	0.00	0.00
100	99.26	16.97

ANTICIPATED RESIDUES:

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=	1	2	3	4	5	10	15	20								
0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20

TOLERANCES:

ANTICIPATED RESIDUES:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	23	11	7	4	3	2	2	2	1	1	1	0	0	0	0	0

INFANTS (<1 YEAR)

ESTIMATED % OF POTENTIAL

MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY

PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY	AS PERCENT OF RDV
0	0.00	0.00
100	76.50	159.67

ANTICIPATED RESIDUES:

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=	1	2	3	4	5	10	15	20								
0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20

TOLERANCES:

ANTICIPATED RESIDUES:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	76	69	62	57	52	47	42	37	34	30	17	10	5	0	0	0

CHILDREN (1-6 YRS)

ESTIMATED % OF POTENTIAL

MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY

PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY	AS PERCENT OF RDV
0	0.00	0.00
100	99.75	48.22

ANTICIPATED RESIDUES:

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=	1	2	3	4	5	10	15	20								
0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20

TOLERANCES:

ANTICIPATED RESIDUES:

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	39	31	26	20	16	13	11	9	7	6	3	1	1	0	0	0

DETAILED ACUTE ANALYSIS INCLUDING AR'S: ALL STATISTICS BASED ON USERS' DAILY CONSUMPTION

 *NAME: PHOSMET (IMIDAN) *****
 CASWELL NO: 543 CFR NO: CFR180.261 A 00000.0200 000040.000 000100 Chronic SF STUDY TYPE SPECIES EFF. LEV. CORE GRADE DOC. NO.
 CAS NO: 00732-11-6 SHAUGHNESSY NO: 059201 B 00000.4000 000040.000 000010 Chron-onco Dog Enzymatic Minimum 0000001999
 STATUS CODES: C 00000.0200 000040.000 000100 Reprductn Rat Enzymatic Minimum 0000001999
 RDV INFO: The LD value used in this analysis is 0.1 MG/KG. of BODY WEIGHT/DAY Rat Systemic Minimum 0000001999
 FILE INFO: No Tolerance Data Are Used-Without User Modifications. AR DATA: No User Modifications

 ESTIMATED % OF POTENTIAL MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY

ESTIMATES BASED ON PERSON DAYS THAT ARE USER-DAYS MG/KG BODY WEIGHT/DAY AS PERCENT OF RDV

TOLERANCES: 0.00
 ANTICIPATED RESIDUES: 99.40

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	20	7	3	2	1	1	0	0	0	0	0	0	0	0	0	0

TOLERANCES:
 ANTICIPATED RESIDUES:

 ESTIMATED % OF POTENTIAL MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY

ESTIMATES BASED ON PERSON DAYS THAT ARE USER-DAYS MG/KG BODY WEIGHT/DAY AS PERCENT OF RDV

TOLERANCES: 0.00
 ANTICIPATED RESIDUES: 99.74

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	17	6	3	1	1	0	0	0	0	0	0	0	0	0	0	0

TOLERANCES:
 ANTICIPATED RESIDUES:

 General U.S. Population
 Exposure = RDV x X
 = 0.1 x 3
 High End Exposure = 0.3
 MOE = Noel + Exposure
 = 1.1 mg/kg/day + 0.3 mg/kg/day
 MOE = 3.6

Infants (< 1 year)

Exposure = RDV x X
= 0.1 x 10
High End Exposure = 1
MOE = Noel + Exposure
= 1.1 mg/kg/day + 1 mg/kg/day
MOE = 1.1

Children (1-6 years)

Exposure = RDV x X
= 0.1 x 10
High End Exposure = 1
MOE = Noel + Exposure
= 1.1 mg/kg/day + 1 mg/kg/day
MOE = 1.1

Females (13+ Years):

Exposure = RDV x X
= 0.1 x 1.4
High End Exposure = 0.14
MOE = Noel + Exposure
= 1.1 mg/kg/day + 0.14 mg/kg/day
MOE = 7.8

Males (13+ Years):

Exposure = RDV x X
= 0.1 x 1.2
High End Exposure = 0.12
MOE = Noel + Exposure
= 1.1 mg/kg/day + 0.12 mg/kg/day
MOE = 9.1

543	01009AA10	10.0000	BLUEBERRIES
543	01009AA21	10.0000	BLUEBERRIES
543	01009AA22	10.0000	BLUEBERRIES
543	01009AA62	10.0000	BLUEBERRIES
543	01010AA10	10.0000	CRANBERRIES
543	01010AA21	10.0000	CRANBERRIES
543	01010AA31	10.0000	CRANBERRIES
543	01010JA15	10.0000	CRANBERRY - JUICE
543	01010JA31	10.0000	CRANBERRY - JUICE
543	01014AA10	10.0000	GRAPES - FRESH
543	01014AA21	10.0000	GRAPES - FRESH
543	01014AA31	10.0000	GRAPES - FRESH
543	01014DA10	10.0000	GRAPES - RAISINS
543	01014DA21	10.0000	GRAPES - RAISINS
543	01014DA22	10.0000	GRAPES - RAISINS
543	01014JA10	10.0000	GRAPES - JUICE
543	01014JA15	10.0000	GRAPES - JUICE
543	01014JA21	10.0000	GRAPES - JUICE
543	03001AA10	0.1000	ALMONDS
543	03001AA21	0.1000	ALMONDS
543	03001AA22	0.1000	ALMONDS
543	03002AA10	0.1000	BRAZIL NUTS
543	03002AA21	0.1000	BRAZIL NUTS
543	03003AA10	0.1000	CASHEWS
543	03003AA21	0.1000	CASHEWS
543	03004AA21	0.1000	CHESTNUTS
543	03005AA10	0.1000	FILBERTS
543	03005AA21	0.1000	FILBERTS
543	03005AA22	0.1000	FILBERTS
543	03006AA10	0.1000	HICKORY NUTS
543	03007AA10	0.1000	MACADAMIA NUTS
543	03008AA10	0.1000	PECANS
543	03008AA21	0.1000	PECANS
543	03008AA22	0.1000	PECANS
543	03008AA23	0.1000	PECANS
543	03008AA62	0.1000	PECANS
543	03009AA10	0.1000	WALNUTS
543	03009AA21	0.1000	WALNUTS
543	03009AA22	0.1000	WALNUTS
543	03010AA00	0.1000	BUTTER NUTS
543	03011AA10	0.1000	PISTACHIO NUTS
543	03013AA00	0.1000	BEECHNUTS
543	04001AA10	10.0000	APPLES - FRESH
543	04001AA21	10.0000	APPLES - FRESH
543	04001AA31	10.0000	APPLES - FRESH
543	04001AA62	10.0000	APPLES - FRESH
543	04001DA10	10.0000	APPLES - DRIED
543	04001DA22	10.0000	APPLES - DRIED
543	04001DA62	10.0000	APPLES - DRIED
543	04001JA15	10.0000	APPLES - JUICE
543	04001JA31	10.0000	APPLES - JUICE
543	04002AA00	20.0000	CRABAPPLES
543	04003AA10	10.0000	PEARS - FRESH
543	04003AA31	10.0000	PEARS - FRESH
543	04003AA51	10.0000	PEARS - FRESH
543	04003AA62	10.0000	PEARS - FRESH
543	04003DA10	10.0000	PEARS - DRIED
543	04003DA21	10.0000	PEARS - DRIED
543	05001AA10	5.0000	APRICOTS - FRESH
543	05001AA21	5.0000	APRICOTS - FRESH
543	05001AA31	5.0000	APRICOTS - FRESH
543	05001DA10	5.0000	APRICOTS - DRIED
543	05001DA22	5.0000	APRICOTS - DRIED
543	05002AA10	10.0000	CHERRIES - FRESH
543	05002AA21	10.0000	CHERRIES - FRESH
543	05002AA31	10.0000	CHERRIES - FRESH
543	05002AA62	10.0000	CHERRIES - FRESH
543	05002DA00	10.0000	CHERRIES - DRIED
543	05002JA15	10.0000	CHERRIES - JUICE
543	05002JA21	10.0000	CHERRIES - JUICE
543	05003AA10	5.0000	NECTARINES
543	05004AA10	10.0000	PEACHES - FRESH
543	05004AA21	10.0000	PEACHES - FRESH
543	05004AA31	10.0000	PEACHES - FRESH
543	05004AA51	10.0000	PEACHES - FRESH
543	05004DA10	10.0000	PEACHES - DRIED
543	05004DA21	10.0000	PEACHES - DRIED
543	05005AA10	5.0000	PLUMS - FRESH
543	05005DA10	5.0000	PLUMS - PRUNES
543	05005DA21	5.0000	PLUMS - PRUNES
543	05005DA31	5.0000	PLUMS - PRUNES
543	05005JA10	5.0000	PRUNE - JUICE
543	05005JA62	5.0000	PRUNE - JUICE
543	06018AA10	25.0000	KIWI
543	14013AA10	0.1000	POTATO (WH) - WHOLE
543	14013AA21	0.1000	POTATO (WH) - WHOLE
543	14013AA22	0.1000	POTATO (WH) - WHOLE
543	14013AB22	0.1000	POTATO (WH) - UNSP
543	14013AC21	0.1000	POTATO (WH) - PULP
543	14013AC22	0.1000	POTATO (WH) - PULP
543	14013AC23	0.1000	POTATO (WH) - PULP
543	14013AC25	0.1000	POTATO (WH) - PULP
543	14013DA10	0.1000	POTATO (WH) - DRY
543	14013DA31	0.1000	POTATO (WH) - DRY
543	14013HA22	0.1000	POTATO (WH) - PEEL
543	14018AA21	10.0000	SWEETPOTATOES
543	14018AA31	10.0000	SWEETPOTATOES
543	14018AA51	10.0000	SWEETPOTATOES
543	15007AA21	0.5000	PEAS DRY - GARDEN
543	15007AA31	0.5000	PEAS DRY - GARDEN
543	15009AA21	0.5000	PEAS SUCC - GARDEN
543	15009AA31	0.5000	PEAS SUCC - GARDEN
543	15032AA21	0.5000	BEANS - DRY

543 53006MA25 0.2000 PORK-LEAN
 543 53006MA26 0.2000 PORK-LEAN

15032AA31 0.5000 BEANS-DRY
 27003OA18 0.2000COTTONSEED-OIL
 27003WA18 0.1000 COTTONSEED-MEAL
 43058AA10 10.0000 WINE AND SHERRY
 43058AA21 10.0000 WINE AND SHERRY
 53001BA21 0.2000 BEEF-MEAT BYP
 53001BA26 0.2000 BEEF-MEAT BYP
 53001BB21 0.2000 BEEF-OTH ORGAN
 53001BB51 0.2000 BEEF-OTH ORGAN
 53001DA21 0.2000 BEEF-DRIED
 53001FA10 0.2000 BEEF-FAT
 53001FA21 0.2000 BEEF-FAT
 53001FA22 0.2000 BEEF-FAT
 53001FA23 0.2000 BEEF-FAT
 53001FA24 0.2000 BEEF-FAT
 53001FA25 0.2000 BEEF-FAT
 53001KA21 0.2000 BEEF-KIDNEY
 53001LA25 0.2000 BEEF-LIVER
 53001LA31 0.2000 BEEF-LIVER
 53001MA10 0.2000 BEEF-LEAN
 53001MA21 0.2000 BEEF-LEAN
 53001MA22 0.2000 BEEF-LEAN
 53001MA23 0.2000 BEEF-LEAN
 53001MA24 0.2000 BEEF-LEAN
 53002BA00 0.2000 GOAT-MEAT BYP
 53002BB00 0.2000 GOAT-OTH ORGAN
 53002FA23 0.2000 GOAT-FAT
 53002FA25 0.2000 GOAT-FAT
 53002KA00 0.2000 GOAT-KIDNEY
 53002LA00 0.2000 GOAT-LIVER
 53002MA23 0.2000 GOAT-LEAN
 53002MA25 0.2000 GOAT-LEAN
 53003AA00 0.2000 HORSE
 53005BA21 0.2000 SHEEP-MEAT BYP
 53005BB21 0.2000 SHEEP-OTH ORGAN
 53005FA21 0.2000 SHEEP-FAT
 53005KA21 0.2000 SHEEP-KIDNEY
 53005LA00 0.2000 SHEEP-LIVER
 53005MA21 0.2000 SHEEP-LEAN
 53005MA31 0.2000 SHEEP-LEAN
 53006BA21 0.2000 PORK-MEAT BYP
 53006BB21 0.2000 PORK-OTH ORGAN
 53006BB26 0.2000 PORK-OTH ORGAN
 53006FA10 0.2000 PORK-FAT
 53006FA21 0.2000 PORK-FAT
 53006FA23 0.2000 PORK-FAT
 53006FA25 0.2000 PORK-FAT
 53006FA26 0.2000 PORK-FAT
 53006KA21 0.2000 PORK-KIDNEY
 53006LA21 0.2000 PORK-LIVER
 53006LA25 0.2000 PORK-LIVER
 53006MA21 0.2000 PORK-LEAN