

US EPA ARCHIVE DOCUMENT



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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 204

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

04/03/98

MEMORANDUM

SUBJECT: Terbufos. List A Reregistration Case No. 0109/Chemical ID No. 105001.
Chronic Dietary Risk Analysis Based on the 3/19/98 Anticipated Residues. No
MRID #. DP Barcode No. D244364.

FROM: Christina B. Swartz, Chemist
Reregistration Branch 1
Health Effects Division (7509C)

THRU: Whang Phang, Ph.D., Branch Senior Scientist
Reregistration Branch 1
Health Effects Division (7509C)

TO: Lisa Nisenson/Robert McNally (PM 60)
Special Review Branch -
Special Review and Reregistration Division (7508W)

Action Requested

In conjunction with the preparation of a revised HED RED chapter for terbufos, an anticipated residues assessment was conducted using % crop treated data from BEAD and field trial data submitted in support of registration and reregistration. A copy of the anticipated residue memo dated 3/19/98 is attached (W. Hazel, Barcode D244268). A revised chronic dietary risk analysis using the Dietary Risk Evaluation System (DRES) has been requested, using the new anticipated residues and the % crop treated data from BEAD.

Toxicological Information

The HED Hazard Identification Assessment Review Committee met on 9/8/97 (memo issued on 9/25/97) to evaluate the terbufos toxicology database with respect to the reproductive, developmental and neurotoxicity data and the application of the additional safety factor required under FQPA. The HED RfD committee had met 5/22/96 and 5/23/96 (memo issued 7/1/96) to reconsider the reference dose (RfD) used in the Agency's chronic dietary risk assessments.

for children 1-6 decreases to 11.6 %RfD (there was no consumption for coffee in non-nursing infants < 1 year) [note that the TMRC was used for coffee, since there were no data for % crop treated available, and since the tolerance was used for the residue level in coffee].

Summary of Terbufos Chronic Dietary Risk for Several Population Subgroups Determined Using DRES (Dietary Risk Evaluation System)

Population Subgroup	%RfD Using Tolerances (TMRC)	%RfD Using Anticipated Residues (ARC)*
General US Population	152.6	8.5 (2.9)
Non-nursing infants (< 1 yr)	397.9	15.8 (14.1)
Children 1-6	351.2	11.7 (9.5)

The numbers in parentheses indicate the %RfD consumed by the use on/consumption of bananas.

Discussion

The chronic dietary risk appears to be below the Agency's level of concern based on the % of the reference dose consumed by the registered uses for the most highly exposed population subgroups. Note that the anticipated residues were generated using field trial data. The low level of confidence in the banana residue data (refer to the 3/19/98 W. Hazel memo) is significant, since a large percentage of the RfD is consumed by the use on/consumption of bananas for the most highly exposed subgroups.

Note that an additional safety factor potentially required for this risk assessment under FQPA has not been applied to the assessment of dietary risk.

- Attachments: (1) 3/19/98 Anticipated Residue Assessment (W. Hazel, Barcode No. D 244268)
 (2) Chronic dietary risk analysis conducted using DRES

DRES Secondary Review: B. Steinwand:4/3/98

cc (with attachments): Reviewer (CSwartz); William Hazel (7509C/HED)
 cc (without attachments): List A Rereg. File; SF
 7509C:CSwartz:RRB1:CM2:Rm 804F:703 305 5877:4/1/98

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

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CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Terbufos Caswell #131A CAS No. 13071-79-9 A.I. CODE: 105001 CFR No. 180.352	28d feeding - dog NOEL = 0.0050 mg/kg 0.00 Ppm LEL = 0.0150 mg/kg 0.00 Ppm OMCO: E (Rfd/PR Committee)	Inhibition of plasma CHE. No evidence of carcinogenicity in rats or mice.	ADI UF -->300 OPP RfD = 0.000050 EPA RfD = 0.000050	No data gaps. 1-yr dog feeding study used as co-critical. LEL = 0.015 mg/kg (inhibition of plasma CHE); NOEL not established.	HED reassess 09/25/97 EPA deferred 06/22/88 WHO reviewed 1989 RfD/PR reviewed 09/25/97 RfD/PR reviewed 05/22/96 RfD/PR reviewed 05/23/96

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	0.000055	0.000076	152.640000	43.142000	0.000004	8.51600
U.S. POPULATION - SPRING SEASON	0.000052	0.000073	145.968000	42.180000	0.000004	8.12600
U.S. POPULATION - SUMMER SEASON	0.000056	0.000078	156.492000	43.828000	0.000004	8.22200
U.S. POPULATION - FALL SEASON	0.000053	0.000075	150.574000	43.910000	0.000004	8.64800
U.S. POPULATION - WINTER SEASON	0.000053	0.000074	148.054000	42.652000	0.000004	8.87000
NORTHEAST REGION	0.000047	0.000067	133.888000	40.472000	0.000004	8.12400
NORTH CENTRAL REGION	0.000054	0.000076	151.798000	43.772000	0.000004	8.70600
SOUTHERN REGION	0.000057	0.000078	155.592000	41.750000	0.000004	7.51200
WESTERN REGION	0.000056	0.000080	160.882000	48.240000	0.000005	10.21400
HISPANICS	0.000070	0.000090	180.962000	40.852000	0.000005	9.62200
NON-HISPANIC WHITES	0.000052	0.000074	147.922000	44.284000	0.000004	8.95000
NON-HISPANIC BLACKS	0.000057	0.000076	152.002000	37.166000	0.000002	4.76200
NON-HISPANIC OTHERS	0.000050	0.000070	140.182000	40.194000	0.000004	8.67600
NURSING INFANTS (< 1 YEAR OLD)	0.000051	0.000071	142.826000	40.796000	0.000006	12.53200
NON-NURSING INFANTS (< 1 YEAR OLD)	0.000116	0.000199	397.922000	166.572000	0.000008	15.82400
FEMALES (13+ YEARS, PREGNANT)	0.000037	0.000052	103.606000	29.582000	0.000003	5.62800
FEMALES 13+ YEARS, NURSING	0.000041	0.000060	120.556000	39.458000	0.000003	6.76400
CHILDREN (1-6 YEARS OLD)	0.000131	0.000176	351.240000	89.794000	0.000006	11.69800
CHILDREN (7-12 YEARS OLD)	0.000089	0.000124	247.160000	68.364000	0.000003	5.53600
MALES (13-19 YEARS OLD)	0.000056	0.000079	157.196000	45.160000	0.000002	3.62600
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)	0.000047	0.000066	131.464000	36.508000	0.000002	3.50000
MALES (20 YEARS AND OLDER)	0.000038	0.000054	108.042000	33.034000	0.000005	9.00400
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)	0.000034	0.000049	97.452000	28.652000	0.000005	9.77400

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

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 131A

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Terbufos Caswell #131A CAS No. 13071-79-9 A.I. CODE: 105001 CFR No. 180.352	28d feeding- dog NOEL= 0.0050 mg/kg LEL= 0.00 ppm 0.0150 mg/kg 0.00 ppm	Inhibition of plasma CHE. No evidence of carcinog- enicity in rats or mice.	ADI UF -->300 OPP RfD= 0.000050 EPA RfD= 0.000050	No data gaps. 1-yr dog feeding study used as co-critical. LEL= 0.015 mg/kg (inhibition of plasma CHE); NOEL not established.	MED reassess 09/25/97 EPA deferred 06/22/88 WHO reviewed 1989 RfD/PR reviewed 09/25/97 RfD/PR reviewed 05/22/96 RfD/PR reviewed 05/23/96

FOOD CODE	FOOD	FOOD FORM	PET. #	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
28023AB	SOYBEANS-DRY	25 COOKED-FRESH-FRIED	2F2608	A 0.050000	0.000000		0.00	0.000000
28023AB	SOYBEANS-DRY	31 COOKED-FRESH OR CANNED	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MA	SOY-FL, FULL FAT	21 COOKED-NFS	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MA	SOY-FL, FULL FAT	22 COOKED-FRESH-BAKED	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MA	SOY-FL, FULL FAT	31 COOKED-FRESH OR CANNED	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MB	SOY-FL, LOW FAT	21 COOKED-NFS	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MC	SOY-FL, DEFAT	10 RAW-FRESH OR NFS	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MC	SOY-FL, DEFAT	21 COOKED-NFS	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MC	SOY-FL, DEFAT	22 COOKED-FRESH-BAKED	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MC	SOY-FL, DEFAT	51 COOKED-CANNED	2F2608	A 0.050000	0.000000		0.00	0.000000
28023MC	SOY-FL, DEFAT	53 COOKED-CANNED-BOILED	2F2608	A 0.050000	0.000000		0.00	0.000000

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CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Terbufos Caswell #131A CAS No. 13071-79-9 A.I. CODE: 105001 CFR No. 180.352	28d feeding - dog NOEL = 0.0050 mg/kg 0.00 ppm LEL = 0.0150 mg/kg 0.00 ppm	Inhibition of plasma Che. No evidence of carcinogenicity in rats or mice.	ADI UF -->300 OPP RfD = 0.000050 EPA RfD = 0.000050	No data gaps. 1-yr dog feeding study used as co-critical. LEL = 0.015 mg/kg (inhibition of plasma CHE); NOEL not established.	HED reassess 09/25/97 EPA deferred 06/22/88 WHO reviewed 1989 RfD/PR reviewed 09/25/97 RfD/PR reviewed 05/22/96 RfD/PR reviewed 05/23/96

COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	THRC (UG/KG/DAY)	%RFD	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD
28023AB	SOYBEANS-MATURE, SEEDS DRY	0.050	0.000045	0.090	0.00000	0.000000	0.000
	10 RAW-FRESH OR NFS				0.00000	0.000000	0.000
	21 COOKED-NFS				0.00000	0.000000	0.000
	23 COOKED-FRESH-BOILED				0.00000	0.000000	0.000
	25 COOKED-FRESH-FRIED				0.00000	0.000000	0.000
28023WA	SOYBEANS-FRESH OR CANNED	0.050	0.000146	0.292	0.00000	0.000000	0.000
	31 COOKED-FRESH OR CANNED				0.00000	0.000000	0.000
	21 COOKED-NFS				0.00000	0.000000	0.000
	22 COOKED-FRESH-BAKED				0.00000	0.000000	0.000
28023WB	SOYBEANS-FLOUR, LOW FAT	0.050	0.000048	0.096	0.00000	0.000000	0.000
	21 COOKED-NFS				0.00000	0.000000	0.000
28023WC	SOYBEANS-FLOUR, DEFFATTED	0.050	0.000623	1.246	0.00000	0.000000	0.000
	10 RAW-FRESH OR NFS				0.00000	0.000000	0.000
	21 COOKED-NFS				0.00000	0.000000	0.000
	22 COOKED-FRESH-BAKED				0.00000	0.000000	0.000
	51 COOKED-CANNED				0.00000	0.000000	0.000
	53 COOKED-CANNED-BOILED				0.00000	0.000000	0.000

CROP GROUP TOTALS FOR LEGUME VEGETABLES:

15004AA	CORN, POP	0.050	0.000339	0.678	0.00055	0.000004	0.008
	21 COOKED-NFS				0.00045	0.000000	0.000
15005AA	CORN, SHEET	0.050	0.011835	23.670	0.00045	0.000090	0.180
	10 RAW-FRESH OR NFS				0.00045	0.000017	0.034
	21 COOKED-NFS				0.00055	0.000000	0.000
	31 COOKED-FRESH OR CANNED				0.00055	0.000012	0.024
24002EA	CORN, GRAIN-ENDOSPERM	0.050	0.008270	16.540	0.00055	0.000068	0.136
	10 RAW-FRESH OR NFS				0.00055	0.000011	0.022
	21 COOKED-NFS				0.00055	0.000000	0.000
	22 COOKED-FRESH-BAKED				0.00055	0.000003	0.006
	23 COOKED-FRESH-BOILED				0.00055	0.000070	0.140
24002HA	CORN, GRAIN-BRAN	0.050	0.000000	0.000	0.00055	0.000008	0.016
	00 NOT SPECIFIED (NO CONSUMPTION)				0.00100	0.000024	0.048
24002SA	CORN SUGAR	0.050	0.007287	14.574	0.00055	0.000013	0.026
	10 RAW-FRESH OR NFS				0.00055	0.000013	0.026
	21 COOKED-NFS				0.00055	0.000013	0.026
	22 COOKED-FRESH-BAKED				0.00055	0.000013	0.026
24006AA	SORGHUM (INCLUDING MILO)	0.050	0.001188	2.376	0.00100	0.000024	0.048
	00 NOT SPECIFIED (NO CONSUMPTION)				0.00100	0.000024	0.048
270020A	CORN, GRAIN-OIL	0.050	0.001140	2.280	0.00055	0.000013	0.026
	18 PROCESSED OIL				0.00055	0.000013	0.026

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CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Terbutos Cashell #131A CAS No. 13071-79-9 A.I. CODE: 1051001 CFR No. 180.352	28d feeding- dog NOEL= 0.0050 mg/kg 0.00 ppm LEL= 0.0150 mg/kg 0.00 ppm	Inhibition of Plasma CHE. No evidence of carcinog- enicity in rats or mice.	ADI UF -->300 OPP RfD= 0.000050 EPA RfD= 0.000050	No data gaps. 1-Yr dog feeding study used as co-critical. LEL= 0.015 mg/kg (inhibition of plasma CHE); NOEL not established.	HED reassess 09/25/97 EPA deferred 06/22/88 WHO reviewed 1989 RfD/PR reviewed 09/25/97 RfD/PR reviewed 05/22/96 RfD/PR reviewed 05/23/96

COMMODITY CONTRIBUTION BY RAC FOR: NON-NURSING INFANTS (< 1 YEAR OLD)

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	THRC (UG/KG/DAY)	%RFD	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD
06002AA	BANANAS-UNSPECIFIED	0.025	P	0.000101	0.202	0.00650	0.000026	0.052
	22 COOKED-FRESH-BAKED							
06002AB	BANANAS-FRESH	0.025	P	0.025276	50.552	0.00650	0.002586	5.172
	10 RAW-FRESH OR NFS					0.00650	0.000015	0.030
	21 COOKED-NFS					0.00650	0.003971	7.942
06002DA	BANANAS-DRIED	0.025	P	0.001716	3.432	0.00650	0.000018	0.036
	10 RAW-FRESH OR NFS					0.00650	0.000429	0.858
06016AA	PLANTAINS	0.025	P	0.000000.	0.000	0.00650	0.000000	0.000
	21 COOKED-NFS					0.00650	0.000000	0.000
	23 COOKED-FRESH-BOILED					0.00650	0.000000	0.000
	25 COOKED-FRESH-FRIED					0.00650	0.000000	0.000
07002AA	COFFEE	0.050	P	0.000000	0.000	0.05000	0.000000	0.000
	21 COOKED-NFS							
08028AA	MUSTARD SEED	0.050	A	0.000000	0.000	0.00000	0.000000	0.000
	11 RAW-FRESH-PICKLED,CORNED,OR CURED					0.00000	0.000000	0.000
	21 COOKED-NFS							
27017AA	RAPE SEED	0.050	A	0.000000	0.000	0.00000	0.000000	0.000
	00 NOT SPECIFIED (NO CONSUMPTION)							
CROP GROUP TOTALS FOR UNSPECIFIED:				0.027093	54.186		0.007045	14.090
25002SA	BET SUGAR	0.050	P	0.019294	38.588	0.00037	0.000006	0.012
	10 RAW-FRESH OR NFS					0.00037	0.000048	0.096
	21 COOKED-NFS					0.00037	0.000012	0.024
	22 COOKED-FRESH-BAKED					0.00037	0.000077	0.154
	31 COOKED-FRESH OR CANNED							
CROP GROUP TOTALS FOR ROOT AND TUBER VEGETABLES:				0.019294	38.588		0.000143	0.286
15006AA	PEANUTS-WHOLE	0.050	A	0.001404	2.808	0.00000	0.000000	0.000
	10 RAW-FRESH OR NFS					0.00000	0.000000	0.000
	21 COOKED-NFS					0.00000	0.000000	0.000
	22 COOKED-FRESH-BAKED					0.00000	0.000000	0.000
270070A	PEANUTS-OIL	0.200	A	0.000240	0.480	0.00000	0.000000	0.000
	18 PROCESSED OIL							
270100A	SOYBEANS-OIL	0.050	A	0.067982	135.964	0.00000	0.000000	0.000
	18 PROCESSED OIL							
28023AA	SOYBEANS-UNSPECIFIED	0.050	A	0.000000	0.000	0.00000	0.000000	0.000
	21 COOKED-NFS							

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CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Terbufos Caswell #131A CAS No. 13071-79-9 A.I. CODE: 105001 CFR No. 180.352	26d feeding- dog NOEL= 0.0050 mg/kg LEL= 0.0150 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Inhibition of plasma CHE. No evidence of carcinog- enicity in rats or mice.	ADI UF -->300 OPP Rfd= 0.000050 EPA Rfd= 0.000050	No data gaps. 1-yr dog feeding study used as co-critical. LEL= 0.015 mg/kg (inhibition of plasma CHE); NOEL not established.	HED reassess 09/25/97 EPA deferred 06/22/88 WHO reviewed 1989 Rfd/PR reviewed 09/25/97 Rfd/PR reviewed 05/22/96 Rfd/PR reviewed 05/23/96

COMMODITY CONTRIBUTION BY RAC FOR: NON-NURSING INFANTS (< 1 YEAR OLD)

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC (UG/KG/DAY)	%RFD	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD
CROP GROUP TOTALS FOR CEREAL GRAINS:							
			0.069388	138.776		0.000724	1.448

GRAND TOTALS FOR NON-NURSING INFANTS (< 1 YEAR OLD)

0.198961 397.922

0.007912 15.824

TOLERANCE TYPE: N=NEW; A=PENDING; P=PUBLISHED
 TMRC=THEORETICAL MAXIMUM RESIDUE CONTRIBUTION
 ARC = ANTICIPATED RESIDUE CONTRIBUTION
 RFD = REFERENCE DOSE



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CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Terbufos Caswell #131A CAS No. 13071-79-9 A.I. CODE: 105001 CFR No. 180.352	28d feeding- dog NOEL= 0.0050 mg/kg 0.00 ppm LEI= 0.0150 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Inhibition of plasma CHE. No evidence of carcinogenicity in rats or mice.	ADI UF -->300 OPP Rfd= 0.000050 EPA Rfd= 0.000050	No data gaps. 1-yr dog feeding study used as co-critical. LEI= 0.015 mg/kg (inhibition of plasma CHE); NOEL not established.	HED reassess 09/25/97 EPA deferred 06/22/88 WHO reviewed 1989 Rfd/PR reviewed 09/25/97 Rfd/PR reviewed 05/22/96 Rfd/PR reviewed 05/23/96

COMMODITY CONTRIBUTION BY RAC FOR: CHILDREN (1-6 YEARS OLD)

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	TMRC (UG/KG/DAY)	%RFD	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD
28023AB	SOYBEANS-MATURE, SEEDS DRY 10 RAW-FRESH OR NFS 21 COOKED-NFS 23 COOKED-FRESH-BOILED 25 COOKED-FRESH-FRIED 31 COOKED-FRESH OR CANNED	0.050	A	0.000037	0.074	0.00000 0.00000 0.00000 0.00000 0.00000	0.000000 0.000000 0.000000 0.000000 0.000000	0.000 0.000 0.000 0.000 0.000
28023MA	SOYBEANS-FLOUR, FULL FAT 21 COOKED-NFS 22 COOKED-FRESH-BAKED 31 COOKED-FRESH OR CANNED	0.050	A	0.000346	0.692	0.00000 0.00000 0.00000	0.000000 0.000000 0.000000	0.000 0.000 0.000
28023MB	SOYBEANS-FLOUR, LOW FAT 21 COOKED-NFS 31 COOKED-FRESH OR CANNED	0.050	A	0.000059	0.118	0.00000 0.00000	0.000000 0.000000	0.000 0.000
28023MC	SOYBEANS-FLOUR, DEFATTED 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED 51 COOKED-CANNED 53 COOKED-CANNED-BOILED	0.050	A	0.001468	2.936	0.00000 0.00000 0.00000 0.00000 0.00000	0.000000 0.000000 0.000000 0.000000 0.000000	0.000 0.000 0.000 0.000 0.000
CROP GROUP TOTALS FOR LEGUME VEGETABLES:					0.044822	89.644	0.000000	0.000
15006AA	CORN, POP 21 COOKED-NFS	0.050	P	0.000796	1.592	0.00055	0.000009	0.018
15005AA	CORN, SWEET 10 RAW-FRESH OR NFS 21 COOKED-NFS 31 COOKED-FRESH OR CANNED	0.050	P	0.027370	54.740	0.00045 0.00045 0.00045	0.000000 0.000206 0.000041	0.000 0.412 0.082
24002EA	CORN, GRAIN-ENDOSPERM 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED 23 COOKED-FRESH-BOILED	0.050	P	0.022514	45.028	0.00055 0.00055 0.00055 0.00055	0.000001 0.000021 0.000188 0.000038	0.002 0.042 0.376 0.076
24002HA	CORN, GRAIN-BRAN 00 NOT SPECIFIED (NO CONSUMPTION)	0.050	P	0.000000	0.000	0.00055	0.000000	0.000
24002SA	CORN SUGAR 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED	0.050	P	0.018685	37.370	0.00055 0.00055 0.00055	0.000003 0.000182 0.000021	0.006 0.364 0.042
24006AA	SORGHUM (INCLUDING MILD) 00 NOT SPECIFIED (NO CONSUMPTION)	0.050	P	0.000000	0.000	0.00100	0.000000	0.000
27002GA	CORN, GRAIN-OIL 18 PROCESSED OIL	0.050	P	0.002093	4.186	0.00055	0.000023	0.046

