

US EPA ARCHIVE DOCUMENT



11-30-89
~~L. CHENG~~
~~F. TOSHIRO~~
9E3790

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

NOV 30 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Dietary Exposure Analysis for the Proposed Use of
Iprodione (Glycophene) on Chinese Mustard, PP#9E3790

FROM: Rita Briggs, Ph.D. *RB*
Dietary Risk Evaluation System Staff
HED/SACB (H7509C)

THROUGH: J. R. Tomerlin, Ph.D. *JRT* *JAC*
Acting DRES Program Manager
HED/SACB (H7509C)

TO: Hoyt L. Jamerson, PM-23
Emergency Response and Minor Use Section
Registration Division (H7505C)

Action Requested

To estimate dietary exposure to iprodione using published and pending tolerances, and the proposed tolerance on chinese mustard.

Discussion

1. Toxicology Endpoint: The routine chronic DRES analysis used a reference dose (ADI) of 0.04 mg/kg body weight/day, based upon a NOEL of 4.2 mg/kg body weight/day and an uncertainty factor of 100 from a 1 year dog feeding study. This value has been approved by HED (12/19/86) and Agency (07/15/87) reference dose committees.

2. Residue Information: Food uses evaluated were published tolerances from 40 CFR 180.399, 40 CFR 185.3750, and the proposed tolerance of 15 ppm for chinese mustard as recommended by DEB (F. Toghrol memo, 11/28). Since there are no consumption data for chinese mustard per se, the DRES analysis used the food consumption data for mustard seeds and mustard greens as reported in the 1977 USDA Food Consumption Survey.

For some commodities, anticipated residue data and/or percent of crop treated data were available to estimate exposure. For other commodities, residue levels were calculated using tolerance levels and assuming that one hundred percent of the crop was treated. A summary of the residue information used in the analysis is attached as Table 1.

Table 1

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 470A DATE: 11/29/89 PAGE: 1

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	UF -->100		
Iprodione (Glycophene) Caswell #470A CAS No. 36734-19-7 A.I. CODE: 109801 CFR No. 180.399	1yr feeding- dog NOEL= 4,2000 mg/kg 100.00 ppm LEL= 15,0000 mg/kg 600.00 ppm ONCO: Negative- 2 species	Increased number of RBC Heinz bodies, decreased prostate weights. NOEL based on calc. dose. No evidence of oncogeni- city in rats or mice.	OPP RfD= 0.040000 EPA RfD= 0.040000		No data gaps.	HED complete 12/19/86. EPA verified 07/15/87. WHO last reviewed 1977. 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)
01002AA	BLACKBERRIES	10 RAW-FRESH OR NFS	7F3542	P 25.00000	25.000000		100.00	25.000000
01002AA	BLACKBERRIES	21 COOKED-NFS	7F3542	P 25.00000	25.000000		100.00	25.000000
01002AA	BLACKBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	7F3542	P 25.00000	25.000000		100.00	25.000000
01003AA	BOYENBERRIES	10 RAW-FRESH OR NFS	7F3542	P 25.00000	25.000000		100.00	25.000000
01004AA	DEWBERRIES	00 NOT SPECIFIED	7F3542	P 25.00000	25.000000		100.00	25.000000
01005AA	LOGANBERRIES	00 NOT SPECIFIED	7F3542	P 25.00000	25.000000		100.00	25.000000
01006AA	RASPBERRIES	10 RAW-FRESH OR NFS	7F3542	P 25.00000	25.000000		100.00	25.000000
01006AA	RASPBERRIES	15 RAW-FRESH OR CANNED	7F3542	P 25.00000	25.000000		100.00	25.000000
01006AA	RASPBERRIES	31 COOKED-FRESH OR CANNED	7F3542	P 25.00000	25.000000		100.00	25.000000
01006AA	RASPBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	7F3542	P 25.00000	25.000000		100.00	25.000000
01006AA	RASPBERRIES	70 RAW-FROZEN	7F3542	P 25.00000	25.000000		100.00	25.000000
01007AA	YOUNGBERRIES	00 NOT SPECIFIED	7F3542	P 25.00000	25.000000		100.00	25.000000
01009AA	BLUEBERRIES	10 RAW-FRESH OR NFS	5E3214	P 15.00000	15.000000		100.00	15.000000
01009AA	BLUEBERRIES	21 COOKED-NFS	5E3214	P 15.00000	15.000000		100.00	15.000000
01009AA	BLUEBERRIES	22 COOKED-FRESH-BAKED	5E3214	P 15.00000	15.000000		100.00	15.000000
01009AA	BLUEBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	5E3214	P 15.00000	15.000000		100.00	15.000000
01011AA	CURRENTS	10 RAW-FRESH OR NFS	5E3214	P 15.00000	15.000000		100.00	15.000000
01011AA	CURRENTS	21 COOKED-NFS	5E3214	P 15.00000	15.000000		100.00	15.000000
01011AA	CURRENTS	22 COOKED-FRESH-BAKED	5E3214	P 15.00000	15.000000		100.00	15.000000
01014AA	GRAPES-FRESH	10 RAW-FRESH OR NFS	3F2964	P 60.00000	5.000000	AVG FLD TRIALS	4.20	0.210000
01014AA	GRAPES-FRESH	21 COOKED-NFS	3F2964	P 60.00000	5.000000	AVG FLD TRIALS	4.20	0.210000
01014AA	GRAPES-FRESH	31 COOKED-FRESH OR CANNED	3F2964	P 60.00000	5.000000	AVG FLD TRIALS	4.20	0.210000
01014DA	GRAPES-RAISINS	10 RAW-FRESH OR NFS	4H5415	P 300.00000	11.000000C	AVG FLD TRIALS	4.20	0.462000
01014DA	GRAPES-RAISINS	21 COOKED-NFS	4H5415	P 300.00000	11.000000C	AVG FLD TRIALS	4.20	0.462000
01014DA	GRAPES-RAISINS	22 COOKED-FRESH-BAKED	4H5415	P 300.00000	11.000000C	AVG FLD TRIALS	4.20	0.462000
01014JA	GRAPES-JUICE	10 RAW-FRESH OR NFS	3F2964	P 60.00000	3.000000C	AVG FLD TRIALS	4.20	0.126000
01014JA	GRAPES-JUICE	15 RAW-FRESH OR CANNED	3F2964	P 60.00000	3.000000C	AVG FLD TRIALS	4.20	0.126000
01014JA	GRAPES-JUICE	21 COOKED-NFS	3F2964	P 60.00000	3.000000C	AVG FLD TRIALS	4.20	0.126000
01016AA	STRAWBERRIES	10 RAW-FRESH OR NFS	7F3510	A 15.00000	11.000000	AVG FLD TRIALS	100.00	11.000000
01016AA	STRAWBERRIES	21 COOKED-NFS	7F3510	A 15.00000	11.000000	AVG FLD TRIALS	100.00	11.000000
01016AA	STRAWBERRIES	70 RAW-FROZEN	7F3510	A 15.00000	11.000000	AVG FLD TRIALS	100.00	11.000000
03001AA	ALMONDS	10 RAW-FRESH OR NFS	5F3241	P 0.300000	0.300000	AVG FLD TRIALS	100.00	0.300000
03001AA	ALMONDS	21 COOKED-NFS	5F3241	P 0.300000	0.300000	AVG FLD TRIALS	100.00	0.300000
03001AA	ALMONDS	22 COOKED-FRESH-BAKED	5F3241	P 0.300000	0.300000	AVG FLD TRIALS	100.00	0.300000
05001AA	APRICOTS-FRESH	10 RAW-FRESH OR NFS	3F2810	P 20.00000	14.000000	AVG FLD TRIALS	37.00	5.180000
05001AA	APRICOTS-FRESH	21 COOKED-NFS	3F2810	P 20.00000	14.000000	AVG FLD TRIALS	37.00	5.180000
05001AA	APRICOTS-FRESH	31 COOKED-FRESH OR CANNED	3F2810	P 20.00000	14.000000	AVG FLD TRIALS	37.00	5.180000
05001DA	APRICOTS-DRIED	10 RAW-FRESH OR NFS	3F2810	P 20.00000	14.000000	AVG FLD TRIALS	37.00	5.180000
05001DA	APRICOTS-DRIED	22 COOKED-FRESH-BAKED	3F2810	P 20.00000	14.000000	AVG FLD TRIALS	37.00	5.180000
05002AA	CHERRIES-FRESH	10 RAW-FRESH OR NFS	2F2596	P 20.00000	14.000000	AVG FLD TRIALS	100.00	14.000000

TABLE 1, continued

DATE: 11/29/89

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 470A

PAGE: 3

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Iprodione (Glycophene) Caswell #470A CAS No. 36734-19-7 A.I. CODE: 109801 CFR No. 180.399	1yr feeding- dog NOEL= 4.2000 mg/kg 100.00 ppm LEL= 15.0000 mg/kg 600.00 ppm ONCO: Negative- 2 species	Increased number of RBC Heinz bodies, decreased prostate weights. NOEL based on calc. dose. No evidence of oncogeni- city in rats or mice.	ADI UF -->100 OPP Rfd= 0.040000 EPA Rfd= 0.040000	No data gaps.	HED complete 12/19/86. EPA verified 07/15/87. WHO last reviewed 1977. 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)
14007AA	GARLIC	10 RAW-FRESH OR NFS	3F2841	P 0.100000	0.100000		100.00	0.100000
14007AA	GARLIC	21 COOKED-NFS	3F2841	P 0.100000	0.100000		100.00	0.100000
14007AA	GARLIC	32 COOKED-FRESH OR CANNED-BAKED	3F2841	P 0.100000	0.100000		100.00	0.100000
14011AA	ONIONS-DRY-BULB	10 RAW-FRESH OR NFS	4F3111	P 0.500000	0.500000		100.00	0.500000
14011AA	ONIONS-DRY-BULB	21 COOKED-NFS	4F3111	P 0.500000	0.500000		100.00	0.500000
14011AA	ONIONS-DRY-BULB	22 COOKED-FRESH-BAKED	4F3111	P 0.500000	0.500000		100.00	0.500000
14011AA	ONIONS-DRY-BULB	31 COOKED-FRESH OR CANNED	4F3111	P 0.500000	0.500000		100.00	0.500000
14011DA	ONIONS-DRYED	12 RAW-FRESH-OR NFS	4F3111	P 0.500000	0.500000		100.00	0.500000
14013AA	POTATO(WH)-WHOLE	10 RAW-FRESH-OR NFS	6F3366	P 0.500000	0.500000		100.00	0.500000
14013AA	POTATO(WH)-WHOLE	21 COOKED-NFS	6F3366	P 0.500000	0.500000		100.00	0.500000
14013AA	POTATO(WH)-WHOLE	22 COOKED-FRESH-BAKED	6F3366	P 0.500000	0.500000		100.00	0.500000
14013AB	POTATO(WH)-UNSP	22 COOKED-FRESH-BAKED	6F3366	P 0.500000	0.500000		100.00	0.500000
14013AC	POTATO(WH)-PULP	21 COOKED-NFS	6F3366	P 0.500000	0.500000		100.00	0.500000
14013AC	POTATO(WH)-PULP	22 COOKED-FRESH-BAKED	6F3366	P 0.500000	0.500000		100.00	0.500000
14013AC	POTATO(WH)-PULP	23 COOKED-FRESH-BOILED	6F3366	P 0.500000	0.500000		100.00	0.500000
14013AC	POTATO(WH)-PULP	25 COOKED-FRESH-FRIED	6F3366	P 0.500000	0.500000		100.00	0.500000
14013DA	POTATO(WH)-DRY	10 RAW-FRESH OR NFS	6F3366	P 0.500000	0.500000		100.00	0.500000
14013DA	POTATO(WH)-DRY	31 COOKED-FRESH OR CANNED	6F3366	P 0.500000	0.500000		100.00	0.500000
14013HA	POTATO(WH)-PEEL	22 COOKED-FRESH-BAKED	6F3366	P 0.500000	0.500000		100.00	0.500000
14017AA	SHALLOTS	00 NOT SPECIFIED	4F3111	P 0.500000	0.500000		100.00	0.500000
15001AA	BEANS-DRY-GRY NO	00 NOT SPECIFIED	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AB	BEANS-DRY-KIDNEY	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AB	BEANS-DRY-KIDNEY	31 COOKED-FRESH OR CANNED	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AC	BEANS-DRY-LIMA	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AD	BEANS-DRY-NAVY	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AD	BEANS-DRY-NAVY	31 COOKED-FRESH OR CANNED	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AE	BEANS-DRY-OTHER	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AE	BEANS-DRY-OTHER	25 COOKED-FRESH-FRIED	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AE	BEANS-DRY-OTHER	31 COOKED-FRESH OR CANNED	4F3150	P 2.000000	2.000000		100.00	2.000000
15001AF	BEANS-DRY-PINTO	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15002AA	BEANS-SUCC-LIMA	10 RAW-FRESH OR NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15002AA	BEANS-SUCC-LIMA	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15003AA	BEANS-SUCC-GREEN	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15003AB	BEANS-SUCC-OTH	10 RAW-FRESH OR NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15003AB	BEANS-SUCC-OTH	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15003AC	BEANS-SUCC-WAX	21 COOKED-NFS	4F3150	P 2.000000	2.000000		100.00	2.000000
15006AA	PEANUTS-WHOLE	10 RAW-FRESH OR NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
15006AA	PEANUTS-WHOLE	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
15006AA	PEANUTS-WHOLE	22 COOKED-FRESH-BAKED	4F3129	P 0.500000	0.500000		100.00	0.500000
15013AA	MUNG BEANS	10 RAW-FRESH OR NFS	4F3150	P 2.000000	2.000000		100.00	2.000000

TABLE 1, continued

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 470A DATE: 11/29/89 PAGE: 5

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Iprodione (Glycophene) Caswell #470A CAS No. 36734-19-7 A.I. CODE: 109801 CFR No. 180.399	1yr feeding- dog NOEL= 4,2000 mg/kg 100.00 ppm LEL= 15,0000 mg/kg 600.00 ppm ONCO: Negative- 2 species	Increased number of RBC Heinz bodies, decreased prostate weights. NOEL based on calc. dose. No evidence of oncogeni- city in rats or mice.	ADI UF -->100 OPP RfD= 0.040000 EPA RfD= 0.040000	No data gaps.	HED complete 12/19/86. EPA verified 07/15/87. WHO last reviewed 1977. 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)
53001LA	BEEF-LIVER	31 COOKED-FRESH OR CANNED	3F2964	P 3.000000	3.000000		100.00	3.000000
53001MA	BEEF-LEAN	10 RAW-FRESH OR NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53001MA	BEEF-LEAN	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53001MA	BEEF-LEAN	22 COOKED-FRESH-BAKED	4F3129	P 0.500000	0.500000		100.00	0.500000
53001MA	BEEF-LEAN	23 COOKED-FRESH-BOILED	4F3129	P 0.500000	0.500000		100.00	0.500000
53001MA	BEEF-LEAN	24 COOKED-FRESH-BROILED	4F3129	P 0.500000	0.500000		100.00	0.500000
53002BA	GOAT-MEAT BYP	00 NOT SPECIFIED	4F3129	P 0.500000	0.500000		100.00	0.500000
53002BB	GOAT-OTH ORGAN	00 NOT SPECIFIED	4F3129	P 0.500000	0.500000		100.00	0.500000
53002FA	GOAT-FAT	23 COOKED-FRESH-BOILED	4F3129	P 0.500000	0.500000		100.00	0.500000
53002FA	GOAT-FAT	25 COOKED-FRESH-FRIED	4F3129	P 0.500000	0.500000		100.00	0.500000
53002KA	GOAT-KIDNEY	00 NOT SPECIFIED	3F2964	P 3.000000	3.000000		100.00	3.000000
53002LA	GOAT-LIVER	00 NOT SPECIFIED	3F2964	P 3.000000	3.000000		100.00	3.000000
53002MA	GOAT-LEAN	23 COOKED-FRESH-BOILED	4F3129	P 0.500000	0.500000		100.00	0.500000
53002MA	GOAT-LEAN	25 COOKED-FRESH-FRIED	4F3129	P 0.500000	0.500000		100.00	0.500000
53003AA	HORSE	00 NOT SPECIFIED	4F3129	P 3.000000	3.000000		100.00	3.000000
53005BA	SHEEP-MEAT BYP	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53005BB	SHEEP-OTH ORGAN	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53005FA	SHEEP-FAT	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53005KA	SHEEP-KIDNEY	21 COOKED-NFS	3F2964	P 3.000000	3.000000		100.00	3.000000
53005LA	SHEEP-LIVER	00 NOT SPECIFIED	3F2964	P 3.000000	3.000000		100.00	3.000000
53005MA	SHEEP-LEAN	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53006BA	PORK-MEAT BYP	31 COOKED-FRESH OR CANNED	4F3129	P 0.500000	0.500000		100.00	0.500000
53006BB	PORK-OTH ORGAN	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53006BB	PORK-OTH ORGAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	4F3129	P 0.500000	0.500000		100.00	0.500000
53006FA	PORK-FAT	10 RAW-FRESH OR NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53006FA	PORK-FAT	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53006FA	PORK-FAT	23 COOKED-FRESH-BOILED	4F3129	P 0.500000	0.500000		100.00	0.500000
53006FA	PORK-FAT	25 COOKED-FRESH-FRIED	4F3129	P 0.500000	0.500000		100.00	0.500000
53006FA	PORK-FAT	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	4F3129	P 0.500000	0.500000		100.00	0.500000
53006KA	PORK-KIDNEY	21 COOKED-NFS	3F2964	P 3.000000	3.000000		100.00	3.000000
53006LA	PORK-LIVER	21 COOKED-NFS	3F2964	P 3.000000	3.000000		100.00	3.000000
53006LA	PORK-LIVER	25 COOKED-FRESH-FRIED	3F2964	P 3.000000	3.000000		100.00	3.000000
53006MA	PORK-LEAN	21 COOKED-NFS	4F3129	P 0.500000	0.500000		100.00	0.500000
53006MA	PORK-LEAN	25 COOKED-FRESH-FRIED	4F3129	P 0.500000	0.500000		100.00	0.500000
53006MA	PORK-LEAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	4F3129	P 0.500000	0.500000		100.00	0.500000
53008BA	TURKEY-BYP	21 COOKED-NFS	6F3443	P 1.000000	1.000000		100.00	1.000000
53008BA	TURKEY-BYP	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	6F3443	P 1.000000	1.000000		100.00	1.000000
53008LA	TURKEY ORGAN	21 COOKED-NFS	6F3443	P 5.000000	5.000000		100.00	5.000000
53008LA	TURKEY ORGAN	25 COOKED-FRESH-FRIED	6F3443	P 5.000000	5.000000		100.00	5.000000

Table 2.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 11/29/89

PAGE: 1

CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Iprodione (Glycophene) Caswell #470A CAS No. 36734-19-7 A.I. CODE: 109801 CFR No. 180.399	1yr feeding- dog NOEL= 4,2000 mg/kg 100.00 ppm LEL= 15,0000 mg/kg 600.00 ppm ONCO: Negative- 2 species	Increased number of RBC Heinz bodies, decreased prostate weights. NOEL based on calc. dose. No evidence of oncogeni- city in rats or mice.	ADI UF -->100 OPP Rfd= 0.040000 EPA Rfd= 0.040000	No data gaps.	HED complete 12/19/86. EPA verified 07/15/87. WHO last reviewed 1977. 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	0.046728	0.049011	122.527570	5.708458	0.014766	36.91526
U.S. POPULATION - SPRING SEASON	0.044071	0.047025	117.561288	7.384870	0.015050	37.62408
U.S. POPULATION - SUMMER SEASON	0.050750	0.052836	132.090828	5.212783	0.015298	38.24394
U.S. POPULATION - FALL SEASON	0.046339	0.048376	120.939605	5.092238	0.014160	35.40000
U.S. POPULATION - WINTER SEASON	0.045483	0.047513	118.783680	5.075585	0.014060	35.15076
NORTHEAST REGION	0.053382	0.055691	139.226383	5.771410	0.015387	38.46672
NORTH CENTRAL REGION	0.044725	0.046975	117.438453	5.626810	0.013518	33.79530
SOUTHERN REGION	0.035365	0.037445	93.613450	5.201848	0.013785	34.46215
WESTERN REGION	0.060013	0.062632	156.580593	6.546903	0.016773	41.93241
HISPANICS	0.048656	0.050416	126.040168	4.400710	0.018315	45.78784
NON-HISPANIC WHITES	0.048359	0.050662	126.653960	5.757335	0.014110	35.27553
NON-HISPANIC BLACKS	0.034726	0.036997	92.493293	5.677965	0.015323	38.30679
NON-HISPANIC OTHERS	0.046518	0.049583	123.958433	7.664580	0.023621	59.05279
NURSING INFANTS (< 1 YEAR OLD)	0.060176	0.060298	150.744965	0.304580	0.016795	41.98716
NON-NURSING INFANTS (< 1 YEAR OLD)	0.144221	0.145216	363.040708	2.488233	0.044299	110.74712
FEMALES (13+ YEARS, PREGNANT)	0.036387	0.038196	95.490743	4.522815	0.010427	26.06819
FEMALES 13+ YEARS, NURSING	0.053460	0.055861	139.652728	6.003655	0.015295	38.23870
CHILDREN (1-6 YEARS OLD)	0.110419	0.113621	284.052123	8.005438	0.028819	72.04818
CHILDREN (7-12 YEARS OLD)	0.060950	0.063725	159.313413	6.937380	0.019829	49.57228
MALES (13-19 YEARS OLD)	0.032342	0.034345	85.861848	5.005855	0.013165	32.91277
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)	0.031543	0.033507	83.767500	4.909160	0.011602	29.00481
MALES (20 YEARS AND OLDER)	0.034446	0.036455	91.138583	5.023125	0.011766	29.41490
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)	0.037696	0.039963	99.908430	5.669370	0.011611	29.02631

*Current TMRC does not include new or pending tolerances.

**New TMRC includes new, pending, and published tolerances.

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