

US EPA ARCHIVE DOCUMENT



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

P/1150/156  
230'

APR 25 1988

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#0F2389. Tolerance Request For Residues of  
Permethrin in or on Alfalfa: TAS Dietary Exposure  
Analysis.

FROM: Susan L. Stanton  
Tolerance Assessment Program  
HED/RCB (TS-769C)

*Susan L. Stanton 04/25/88*

THRU: Karl Arne, Ph.D. *KAME*  
Branch Senior Scientist  
HED/RCB (TS-769C)

TO: George LaRocca/Christine Dively, PM #15  
Insecticide - Rodenticide Branch  
Registration Division (TS-767C)

Action Requested

Provide a TAS dietary exposure analysis of the proposed use  
of the insecticide permethrin in or on alfalfa.

RCB has reviewed petition #0F2389 and recommends that the  
proposed tolerances for permethrin and its metabolites in or on  
alfalfa, alfalfa hay, and animal commodities be established,  
provided specified conditions concerning the tolerance expression  
and wording of the Section F are met (memo. N. Dodd to LaRocca,  
03/04/88).

Discussion

1. A routine chronic analysis was conducted using a  
Reference Dose (ADI) of 0.05 mg/kg body weight/day based on a  
NOEL of 5 mg/kg/day from a 2-year rat feeding study with a  
safety factor of 100. This value has been approved by the Tox  
Branch ADI Committee (09/12/86) and verified by the Agency  
reference dose committee (10/28/86).

2. The food uses evaluated were those for which tolerances  
are established under 40 CFR 180.378, the proposed use on  
alfalfa, and other pending tolerances (including proposed

tolerances on avocados, papayas, dry bulb onions, and sunflower seeds and a proposed increase in the tolerance for asparagus from 1 to 2 ppm). Table 1 provides a complete listing of residue information.

3. The TAS routine chronic analysis calculates the Theoretical Maximum Residue Contribution (TMRC) for the U.S. population and each of 22 population subgroups (see Table 2) and compares this exposure estimate to the reference dose (ADI in this case).

The TMRC from all food uses (including the new use on alfalfa and other pending tolerances) for the U.S. Population is calculated to be 0.017131 mg/kg body weight/day, which occupies approximately 34% of the ADI. The two most highly exposed population subgroups are infants (TMRC = 0.032952 mg/kg/day or 66% of the ADI) and children, ages 1 to 6 (TMRC = 0.028627 mg/kg/day or 57% of the ADI). Table 3 provides a more detailed summary of the analysis for these 3 populations and includes estimates of exposure by tolerance type (published, new action, and other pending).

4. This analysis uses tolerance level residues with an assumption of 100% crop treated, a conservative approach that likely overestimates exposure significantly. However, since estimated exposure and risk using this approach are acceptable, no further data are required at this time.

cc: TAS File  
Reading File  
circ.  
PP#0F2389

TOX (Rathman)  
Permethrin SF  
PMSD

Table 1

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	SF		
Permethrin	2yr feeding- rat	Decreased liver weights.	100	100	No data gaps.	TOX complete 9/12/86.
Caswell #652BB	NOEL= 5.0000 mg/kg	Slight increase in liver	OPP RfD= 0.050000		Slight increase in liver	EPA verified 10/28/86.
CAS No. 52645-53-1	100.00 ppm	weights noted at 5 mg/kg.	EPA RfD= 0.050000		weights at 5 mg/kg only	WHO last reviewed 1987;
A.I. CODE: 109701	LEL= 25.0000 mg/kg	Evidence of oncogenicity			noted in 1/3 rat studies,	(ADI extended to 25:75
CFR No. 180.378	500.00 ppm	in mice (liver, lung),	WHO RfD 0.050000		not considered toxicolo-	mixture).
	ONCO: Pending NOTE	negative rat.	Type: ADI		gically significant.	On IRIS.

FOOD CODE	FOOD NAME	PETITION NUMBER	TOLERANCE (PPM)	
			NEW	PUBLISHED
03001AA	ALMONDS	2F2675		0.0500
03005AA	FILBERTS/HAZELNUTS	4F3130		0.0500
03009AA	WALNUTS	4F3130		0.0500
03011AA	PISTACHIO NUTS	4F2995		0.1000
04001AA	APPLES-FRESH	1F2562		0.0500
04001DA	APPLES-DRIED	1F2562		0.0500
04001JA	APPLES-JUICE	1F2562		0.0500
04003AA	PEARS-FRESH	0F2425		3.0000
04003DA	PEARS-DRIED	0F2425		3.0000
05002AA	CHERRIES-FRESH	5F3271		3.0000
05002DA	CHERRIES-DRIED	5F3271		3.0000
05002JA	CHERRIES-JUICE	5F3271		3.0000
05004AA	PEACHES-FRESH	3F2802		5.0000
05004DA	PEACHES-DRIED	3F2802		5.0000
06001AA	AVOCADOS	4E3146	1.0000	
06010AA	PAPAYAS-UNSPECIFIED	4E3146	1.0000	
06010AB	PAPAYAS-PULP	4E3186	1.0000	
06010DA	PAPAYAS-DRIED	4E3186	1.0000	
06010JA	PAPAYAS-JUICE	4E3186	1.0000	
06018AA	KIWI	1E2514		2.0000
08022AA	HORSERADISH	0E2377		1.0000
10002AA	CANTALOUPE-UNSPECIFIED	5E3225		3.0000
10002AB	CANTALOUPE-PULP	5E3225		3.0000
10011AA	PUMPKIN	3E2861		2.0000
11001AA	EGGPLANT	3E2892		1.0000
11003AA	PEPPERS (SWEET/GARDEN)	3E2892		1.0000
11005AA	TOMATOES-WHOLE	4F2985		2.0000
11005JA	TOMATOES-JUICE	4F2985		2.0000
11005RA	TOMATOES-PUREE	4F2985		2.0000
11005TA	TOMATOES-PASTE	4F2985		2.0000
11005UA	TOMATOES-CATSUP	4F2985		2.0000
13002AA	CELERY	8F2099		5.0000
13003AA	CHICORY (FRENCH OR BELGIAN ENDIVE)	4F3018		20.0000
13005AA	BROCCOLI	9F2207		1.0000
13006AA	BRUSSEL SPROUTS	9F2207		1.0000
13007AA	CABBAGE-GREEN AND RED	9F2192		6.0000
13008AA	CAULIFLOWER	9F2207		1.0000
13009AA	COLLARDS	6E3360		20.0000
13010AA	CABBAGE-CHINESE/CELERY (INC. BOK CHOY)	9F2192		6.0000
13013AA	LETTUCE-LEAFY VARIETIES	4F3018		20.0000

W

Table 1 (con't.)

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	SF -->		
Permethrin	2yr feeding- rat	Decreased liver weights.	100	100	No data gaps.	TOX complete 9/12/86.
Caswell #652BB	NOEL= 5.0000 mg/kg	Slight increase in liver	OPP RFD= 0.050000		Slight increase in liver	EPA verified 10/28/86.
CAS No. 52645-53-1	100.00 ppm	weights noted at 5 mg/kg.	EPA RFD= 0.050000		weights at 5 mg/kg only	WHO last reviewed 1987;
A.I. CODE: 109701	LEL= 25.0000 mg/kg	Evidence of oncogenicity			noted in 1/3 rat studies,	(ADI extended to 25:75
CFR No. 180.378	500.00 ppm	in mice (liver, lung),	WHO RFD 0.050000		not considered toxicolo-	mixture).
	ONCO: Pending WOTE	negative rat.	Type: ADI		gically significant.	On IRIS.

FOOD CODE	FOOD NAME	PETITION NUMBER	NEW	TOLERANCE (PPM)		PUBLISHED
				PENDING	PUBLISHED	
13014AA	DANDELION	4F3018				20.0000
13015AA	ENDIVE (CURLY AND ESCAROLE)	4F3018				20.0000
13016AA	FENNEL	8F2099				5.0000
13017AA	CRESS (GARDEN/FIELD)	4F3018				20.0000
13018AA	ARTICHOKES-GLOBE	4F3114				10.0000
13020AA	LETTUCE-UNSPECIFIED	4F3018				20.0000
13022AA	PARSLEY	4F3018				20.0000
13023AA	RHUBARB	4F3018				20.0000
13024AA	SPINACH	2E2701				20.0000
13025AA	SWISS CHARD	4F3018				20.0000
13026AA	TURNIPS-TOPS	6E3360				20.0000
13027AA	WATERCRESS	4E3113				5.0000
13039AA	CRESS/UPLAND	4F3018				20.0000
13045AA	LETTUCE-HEAD VARIETIES	9F2192				20.0000
14007AA	GARLIC	8E3583		0.1000		
14011AA	ONIONS-DRY-BULB (CIPOLLINI)	8E3583		0.1000		
14011DA	ONIONS-DEHYDRATED OR DRIED	8E3583		0.1000		
14013AA	POTATOES(WHITE)-WHOLE	0F2307			0.0500	
14013AB	POTATOES(WHITE)-UNSPECIFIED	0F2307			0.0500	
14013AC	POTATOES(WHITE)-PEELED	0F2307			0.0500	
14013DA	POTATOES(WHITE)-DRY	0F2307			0.0500	
14013HA	POTATOES(WHITE)-PEEL ONLY	0F2307			0.0500	
14017AA	SHALLOTS	8E3583		0.1000		
14019AA	TURNIPS-ROOTS	6E3360			1.0000	
15004AA	CORN/POP	1F2476			0.0500	
15005AA	CORN/SWEET	3F2781			0.1000	
15018AA	SUNFLOWER-SEEDS	4F2981		0.0500		
15029AA	SOYBEANS-SPROUTED SEEDS	9F2196			0.0500	
16002AA	ASPARAGUS	3E2914			1.0000	
16002AA	ASPARAGUS	8F3595			1.0000	
16003AA	MUSHROOMS	2F2752		1.0000		
24002EA	CORN/GRAIN-ENDOSPERM	1F2476			6.0000	
24002HA	CORN/GRAIN-BRAN	1F2476			0.0500	
24002SA	CORN SUGAR	1F2476			0.0500	
270020A	CORN/GRAIN-OIL	1F2476			0.0500	
270030A	COTTONSEED-OIL				0.5000	
27003WA	COTTONSEED-MEAL				0.5000	
270100A	SOYBEANS-OIL				0.5000	
270110A	SUNFLOWER-OIL			0.0500		
28023AA	SOYBEANS-UNSPECIFIED	9F2196			0.0500	
		4F2981				
		9F2196				

Table 1 (cont.)

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	SF		
Permethrin	2yr feeding- rat	Decreased liver weights.	100	-->	No data gaps.	TOX complete 9/12/86.
Caswell #652BB	NOEL= 5.0000 mg/kg	Slight increase in liver	OPP RFD= 0.050000		Slight increase in liver	EPA verified 10/28/86.
CAS No. 52645-53-1	100.00 ppm	weights noted at 5 mg/kg.	EPA RFD= 0.050000		weights at 5 mg/kg only	WHO last reviewed 1987;
A.I. CODE: 109701	LEL= 25.0000 mg/kg	Evidence of oncogenicity			noted in 1/3 rat studies,	(ADI extended to 25:75
CFR No. 180.378	500.00 ppm	in mice (liver, lung),	WHO RFD 0.050000		not considered toxicolo-	mixture).
	ONCO: Pending NOTE	negative rat.	Type: ADI		gically significant.	On IRIS.

FOOD CODE	FOOD NAME	PETITION NUMBER	NEW	TOLERANCE (PPM)	
				PENDING	PUBLISHED
28023AB	SOYBEANS-MATURE/SEEDS DRY	9F2196			0.0500
28023WA	SOYBEANS-FLOUR/FULL FAT	9F2196			0.0500
28023WB	SOYBEANS-FLOUR/LOW FAT	9F2196			0.0500
28023WC	SOYBEANS-FLOUR/DEFAITED	9F2196			0.0500
50000FA	MILK-FAT SOLIDS	3F2781			3.7500 H
50000FA	MILK-FAT SOLIDS	OF2389	2.5000		H
53001BA	BEEF-MEAT BYPRODUCTS	1F2564			1.0000
53001BA	BEEF-MEAT BYPRODUCTS	OF2389	1.0000		
53001BB	BEEF (ORGAN MEATS)-OTHER	1F2564			1.0000
53001BB	BEEF (ORGAN MEATS)-OTHER	OF2389	1.0000		
53001DA	BEEF-DRIED	1F2564			0.1500
53001DA	BEEF-DRIED	OF2389	0.1000		
53001FA	BEEF (BONELESS)-FAT (BEEF TALLOW)	1F2564			2.0000
53001FA	BEEF (BONELESS)-FAT (BEEF TALLOW)	OF2389	1.0000		
53001KA	BEEF (ORGAN MEATS)-KIDNEY	1F2564			1.0000
53001KA	BEEF (ORGAN MEATS)-KIDNEY	OF2389	1.0000		
53001LA	BEEF (ORGAN MEATS)-LIVER	1F2564			1.0000
53001LA	BEEF (ORGAN MEATS)-LIVER	OF2389	1.0000		
53001MA	BEEF (BONELESS)-LEAN (W/O REMOVEABLE FAT)	1F2564			0.1500
53001MA	BEEF (BONELESS)-LEAN (W/O REMOVEABLE FAT)	OF2389	0.1000		
53002BA	GOAT-MEAT BYPRODUCTS	1F2564			1.0000
53002BA	GOAT-MEAT BYPRODUCTS	OF2389	1.0000		
53002BB	GOAT (ORGAN MEATS)-OTHER	1F2564			1.0000
53002BB	GOAT (ORGAN MEATS)-OTHER	OF2389	1.0000		
53002FA	GOAT (BONELESS)-FAT	1F2564			2.0000
53002FA	GOAT (BONELESS)-FAT	OF2389	1.0000		
53002KA	GOAT (ORGAN MEATS)-KIDNEY	1F2564			1.0000
53002KA	GOAT (ORGAN MEATS)-KIDNEY	OF2389	1.0000		
53002LA	GOAT (ORGAN MEATS)-LIVER	1F2564			1.0000
53002LA	GOAT (ORGAN MEATS)-LIVER	OF2389	1.0000		
53002MA	GOAT (BONELESS)-LEAN (W/O REMOVEABLE FAT)	1F2564			0.1500
53002MA	GOAT (BONELESS)-LEAN (W/O REMOVEABLE FAT)	OF2389	0.1000		
53003AA	HORSE	1F2564			2.0000
53003AA	HORSE	OF2389	1.0000		
53005BA	SHEEP-MEAT BYPRODUCTS	1F2564			1.0000
53005BA	SHEEP-MEAT BYPRODUCTS	OF2389	1.0000		
53005BB	SHEEP (ORGAN MEATS)-OTHER	1F2564			1.0000
53005BB	SHEEP (ORGAN MEATS)-OTHER	OF2389	1.0000		
53005FA	SHEEP (BONELESS)-FAT	1F2564			2.0000
53005FA	SHEEP (BONELESS)-FAT	OF2389	1.0000		

Table 1 (con't.)

CHEMICAL INFORMATION FOR CASWELL NUMBER 652BB DATE: 04/25/88 PAGE: 4

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	SF -->		
Permethrin	2yr feeding- rat	Decreased liver weights.	100		No data gaps.	TOX complete 9/12/86.
Caswell #652BB	NOEL= 5.0000 mg/kg	Slight increase in liver	OPP RfD= 0.050000		Slight increase in liver	EPA verified 10/28/86.
CAS NO. 52645-53-1	100.00 ppm	weights noted at 5 mg/kg.	EPA RfD= 0.050000		weights at 5 mg/kg only	WHO last reviewed 1987;
A.I. CODE: 109701	LEL= 25.0000 mg/kg	Evidence of oncogenicity			noted in 1/3 rat studies,	(ADI extended to 25:75
CFR No. 180.378	500.00 ppm	in mice (liver, lung),	WHO RfD 0.050000		not considered toxicolo-	mixture).
	ONCO: Pending NOTE	negative rat.	Type: ADI		gically significant.	On IRIS.

FOOD CODE	FOOD NAME	PETITION NUMBER	TOLERANCE (PPM)		PUBLISHED
			NEW	PENDING	
53005KA	SHEEP (ORGAN MEATS)-KIDNEY	1F2564			1.0000
53005KA	SHEEP (ORGAN MEATS)-KIDNEY	0F2389	1.0000		
53005LA	SHEEP (ORGAN MEATS)-LIVER	1F2564			1.0000
53005LA	SHEEP (ORGAN MEATS)-LIVER	0F2389	1.0000		
53005MA	SHEEP (BONELESS)-LEAN (W/O REMOVEABLE FAT	1F2564			0.1500
53005MA	SHEEP (BONELESS)-LEAN (W/O REMOVEABLE FAT	0F2389	0.1000		
53006BA	PORK-MEAT BYPRODUCTS	1F2546			3.0000
53006BB	PORK (ORGAN MEATS)-OTHER	1F2546			3.0000
53006FA	PORK (BONELESS)-FAT (INCLUDING LARD)	1F2546			2.0000
53006KA	PORK (ORGAN MEATS)-KIDNEY	1F2546			3.0000
53006LA	PORK (ORGAN MEATS)-LIVER	1F2546			3.0000
53006MA	PORK (BONELESS)-LEAN (W/O REMOVEABLE FAT)	1F2546			0.1500
55006BA	TURKEY-BYPRODUCTS	1F2564			0.0500
55008LA	TURKEY-GIBLETS (LIVER)	1F2564			0.0500
55008MA	TURKEY-FLESH(W/O SKIN & W/O BONES)	1F2564			0.0500
55008MB	TURKEY-FLESH(+SKIN & W/O BONES)	1F2564			0.0500
55008MC	TURKEY-UNSPECIFIED	1F2564			0.0500
55013BA	POULTRY/OTHER-BYPRODUCTS	1F2564			0.0500
55013LA	POULTRY/OTHER-GIBLETS (LIVER)	1F2564			0.0500
55013MA	POULTRY/OTHER-FLESH (+SKIN & W/O BONES)	1F2564			0.0500
55014AA	EGGS-WHOLE	1F2564			0.0500
55014AB	EGGS-WHITE ONLY	1F2564			0.0500
55014AC	EGGS-YOLK ONLY	1F2564			0.0500
55015BA	CHICKEN-BYPRODUCTS	1F2564			0.0500
55015LA	CHICKEN-GIBLETS(LIVER)	1F2564			0.0500
55015MA	CHICKEN-FLESH(W/O SKIN & W/O BONES)	1F2564			0.0500
55015MB	CHICKEN-FLESH(+SKIN & W/O BONES)	1F2564			0.0500
90997AA	INEST. RACS--TOLERANCE TOO SPECIFIC	1F2546			
90999AA	FEED RACS--INEST. FROM USDA SURVEY	2F2675			

Table 2

## TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 04/25/88

PAGE: 1

CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			ADI	100		
Pemmethrin	2yr feeding- rat	Decreased liver weights.	OPP RfD= 0.050000	No data gaps.	TOX complete 9/12/86.	
Caswell #6528B	NOEL= 5.0000 mg/kg	Slight increase in liver weights noted at 5 mg/kg.	EPA RfD= 0.050000	Slight increase in liver weights at 5 mg/kg only	EPA verified 10/28/86.	
CAS No. 52645-53-1	100.00 ppm	Evidence of oncogenicity in mice (liver, lung), negative rat.		noted in 1/3 rat studies, not considered toxicologically significant.	WHO last reviewed 1987; (ADI extended to 25:75 mixture).	
A.I. CODE: 109701	LEL= 25.0000 mg/kg		WHO RfD 0.050000			
CFR No. 180.378	500.00 ppm		Type: ADI		On IRIS.	
	ONCO: Pending NOTE					

## TOTAL TMRC (MG/KG BODY WEIGHT/DAY)

POPULATION SUBGROUP

POPULATION SUBGROUP	CURRENT TMRC*	NEW TMRC**	NEW TMRC AS PERCENT OF RFD	DIFFERENCE AS PERCENT OF RFD	EFFECT OF ANTICIPATED RESIDUES
U.S. POPULATION - 48 STATES	0.015461	0.017131	34.262686	3.341652	
U.S. POPULATION - SPRING SEASON	0.015735	0.017370	34.740742	3.270836	
U.S. POPULATION - SUMMER SEASON	0.016169	0.017832	35.664312	3.326820	
U.S. POPULATION - FALL SEASON	0.014907	0.016614	33.228240	3.415200	
U.S. POPULATION - WINTER SEASON	0.015028	0.016705	33.410400	3.353626	
NORTHEAST REGION	0.015873	0.017648	35.296340	3.550630	
NORTH CENTRAL REGION	0.015109	0.016778	33.556450	3.338292	
SOUTHERN REGION	0.014257	0.015737	31.474050	2.959544	
WESTERN REGION	0.017503	0.019367	38.734660	3.727720	
HISPANICS	0.015958	0.018019	36.038468	4.123008	
NON-HISPANIC WHITES	0.015344	0.017020	34.039216	3.352200	
NON-HISPANIC BLACKS	0.015686	0.017124	34.248082	2.875906	
NON-HISPANIC OTHERS	0.017983	0.019778	39.556070	3.589538	
NURSING INFANTS (< 1 YEAR OLD)	0.013301	0.014071	28.141180	1.540096	
NON-NURSING INFANTS (< 1 YEAR OLD)	0.029004	0.032952	65.903000	7.895780	
FEMALES (13+ YEARS, PREGNANT)	0.012279	0.013420	26.840642	2.283068	
FEMALES 13+ YEARS, NURSING CHILDREN (1-6 YEARS OLD)	0.016248	0.017762	35.524656	3.028870	
CHILDREN (7-12 YEARS OLD)	0.024570	0.028627	57.254896	8.114772	
MALES (13-19 YEARS OLD)	0.020830	0.023538	47.076648	5.416886	
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)	0.014273	0.016125	32.249636	3.703400	
MALES (20 YEARS AND OLDER)	0.013113	0.014580	29.159716	2.934538	
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)	0.012813	0.014032	28.063666	2.437038	
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)	0.013810	0.014854	29.708104	2.088278	

\*Current TMRC does not include new or pending tolerances.

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



Table 3

TOLERANCE ASSESSMENT SUMMARY FOR Permethrin  
CASWELL #652BB

DATE: 04/25/88

ANALYSIS FOR POPULATION SUB-GROUP: U.S. POPULATION - 48 STATES

EXISTING TOLERANCES (PUBLISHED ONLY)		
RESULT IN A TMRC OF:	0.015461	MG/KG/DAY
THE EXISTING TMRC IS EQUIVALENT TO:	30.921034	% OF THE ADI.
PROPOSED NEW TOLERANCES (CURRENT PETITION ONLY)		
RESULT IN A TMRC OF:	0.001613	MG/KG/DAY
THESE NEW TOLERANCES WILL OCCUPY:	3.226780	% OF THE ADI.
IF THE NEW TOLERANCES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT TMRC WILL BE:	0.017074	MG/KG/DAY
THE NEW TMRC WILL OCCUPY	34.147814	% OF THE ADI.
OTHER PENDING TOLERANCES EXCLUDING THE		
CURRENT NEW PETITION HAVE A TMRC OF:	0.000057	MG/KG/DAY
THIS TMRC WILL OCCUPY	0.114872	% OF THE ADI.
IF ALL PENDING TOLERANCES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT TMRC WILL BE:	0.017131	MG/KG/DAY
THE TOTAL TMRC WILL OCCUPY	34.262686	% OF THE ADI.

ANALYSIS FOR POPULATION SUB-GROUP: NON-NURSING INFANTS (< 1 YEAR OLD)

EXISTING TOLERANCES (PUBLISHED ONLY)		
RESULT IN A TMRC OF:	0.029004	MG/KG/DAY
THE EXISTING TMRC IS EQUIVALENT TO:	58.007220	% OF THE ADI.
PROPOSED NEW TOLERANCES (CURRENT PETITION ONLY)		
RESULT IN A TMRC OF:	0.003935	MG/KG/DAY
THESE NEW TOLERANCES WILL OCCUPY:	7.869784	% OF THE ADI.
IF THE NEW TOLERANCES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT TMRC WILL BE:	0.032939	MG/KG/DAY
THE NEW TMRC WILL OCCUPY	65.877004	% OF THE ADI.
OTHER PENDING TOLERANCES EXCLUDING THE		
CURRENT NEW PETITION HAVE A TMRC OF:	0.000013	MG/KG/DAY
THIS TMRC WILL OCCUPY	0.025996	% OF THE ADI.
IF ALL PENDING TOLERANCES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT TMRC WILL BE:	0.032952	MG/KG/DAY
THE TOTAL TMRC WILL OCCUPY	65.903000	% OF THE ADI.

ANALYSIS FOR POPULATION SUB-GROUP: CHILDREN (1-6 YEARS OLD)

EXISTING TOLERANCES (PUBLISHED ONLY)		
RESULT IN A TMRC OF:	0.024570	MG/KG/DAY
THE EXISTING TMRC IS EQUIVALENT TO:	49.140124	% OF THE ADI.
PROPOSED NEW TOLERANCES (CURRENT PETITION ONLY)		
RESULT IN A TMRC OF:	0.003993	MG/KG/DAY
THESE NEW TOLERANCES WILL OCCUPY:	7.985102	% OF THE ADI.
IF THE NEW TOLERANCES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT TMRC WILL BE:	0.028563	MG/KG/DAY
THE NEW TMRC WILL OCCUPY	57.125226	% OF THE ADI.
OTHER PENDING TOLERANCES EXCLUDING THE		
CURRENT NEW PETITION HAVE A TMRC OF:	0.000065	MG/KG/DAY
THIS TMRC WILL OCCUPY	0.129670	% OF THE ADI.
IF ALL PENDING TOLERANCES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT TMRC WILL BE:	0.028627	MG/KG/DAY
THE TOTAL TMRC WILL OCCUPY	57.254896	% OF THE ADI.