



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

FEB 19 1991

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Carcinogenic Risk for Simazine Registered Commodities.

FROM: Richard Griffin, DRES *R. Griff*
Dietary Exposure Section
Science and Coordination Branch HED

TO: Philip Poli
Special Review Branch
SRRD, (H7508C)

As requested, carcinogenic risk per commodity based on the residue/usage information of Table 1. and a Q_1^* value of 0.12 (mg/kg/day)⁻¹.

Avocados	2.3 E-8	Poultry Meats	1.8 E-8
Bananas/Plantains	5.6 E-8	Fish	1.7 E-6
Olives	3.4 E-9	Milk	8.9 E-8
Artichokes	2.9 E-8	Eggs	2.1 E-8
Asparagus	1.4 E-7		
Cane Sugar	6.2 E-7	TOTAL	1.4 E-5
Cane Molasses	8.3 E-8		
Olive Oil	8.8 E-9		
Grapefruit	6.2 E-7		
Lemons	1.2 E-7		
Oranges	5.7 E-6		
Apples	1.9 E-6		
Pears	3.7 E-7		
Cherries	2.0 E-7		
Peaches	4.5 E-7		
Plums	8.9 E-9		
Caneberries	8.6 E-8		
Blueberries	5.4 E-8		
Cranberries	2.0 E-7		
Currants	3.1 E-9		
Grapes	4.7 E-7		
Strawberries	2.1 E-7		
Sweet Corn	1.4 E-7		
Grain Corn	8.0 E-8		
Almonds	1.5 E-8		
Filberts/Hazelnuts	4.8 E-9		
Pecans	5.8 E-9		
Walnuts	2.9 E-8		
Red Meats	2.8 E-8		

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

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CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Simazine	2yr feeding- rat	Reduction in weight gains in females.	PADI UF -->300	Reproduction - rat	HED complete 04/25/86.		
Caswell #740	NOEL= 0.5200 mg/kg	hematological changes in females.	OPP Rfd= 0.002000	Teratology - rat	EPA verified 06/24/86.		
CAS No. 122-34-9	10.00 ppm	Evidence of oncogenicity in rats; negative in mouse.	EPA Rfd= 0.002000		HED reassess 05/25/89.		
A.I. CODE: 080807	LEL= 5.3000 mg/kg				EPA verified 06/15/89.		
CFR No. 180.213	100.00 ppm				On IRIS.		
	ONCO: Positive - 1 species						

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	THRC (UG/KG/DAY)	%RFD	THRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK
CROP GROUP TOTALS FOR UNSPECIFIED:										
02002AA	GRAPEFRUIT-UNSPECIFIED	0.250	P	0.000000	0.000000	0.000000000000	0.02250	0.000000	0.000	0.000000000000
	00 NOT SPECIFIED									
02002AB	GRAPEFRUIT-PULP	0.250	P	0.017116	0.856	0.00000205392	0.02250	0.001539	0.077	0.00000018468
	10 RAW-FRESH OR NFS						0.02250	0.000002	0.000	0.000000000024
	21 COOKED-NFS									
02002JA	GRAPEFRUIT-JUICE	0.250	P	0.040613	2.031	0.00000487356	0.02250	0.003531	0.177	0.00000042372
	15 RAW-FRESH OR CANNED						0.02250	0.000124	0.006	0.00000001488
	31 COOKED-FRESH OR CANNED									
02004AA	LEMONS-UNSPECIFIED	0.250	P	0.000517	0.026	0.00000006204	0.02500	0.000050	0.003	0.00000000600
	10 RAW-FRESH OR NFS						0.02500	0.000002	0.000	0.00000000024
	22 COOKED-FRESH-BAKED									
02004AB	LEMONS-PULP	0.250	P	0.000054	0.003	0.00000000648	0.02500	0.000003	0.000	0.00000000036
	10 RAW-FRESH OR NFS						0.02500	0.000002	0.000	0.00000000024
	31 COOKED-FRESH OR CANNED									
02004HA	LEMONS-PEEL	0.250	P	0.000064	0.003	0.00000000768	0.02500	0.000006	0.000	0.00000000072
	10 RAW-FRESH OR NFS						0.02500	0.000001	0.000	0.00000000012
	21 COOKED-NFS									
02004JA	LEMONS-JUICE	0.250	P	0.009478	0.474	0.00000113736	0.02500	0.000208	0.010	0.00000002496
	10 RAW-FRESH OR NFS						0.02500	0.000134	0.007	0.00000001608
	15 RAW-FRESH OR CANNED						0.02500	0.000318	0.016	0.00000003816
	21 COOKED-NFS						0.02500	0.000288	0.014	0.00000003456
	31 COOKED-FRESH OR CANNED									
02006AA	ORANGES-UNSPECIFIED	0.250	P	0.000000	0.000	0.000000000000	0.02250	0.000000	0.000	0.000000000000
	00 NOT SPECIFIED									
02006AB	ORANGES-PULP	0.250	P	0.037588	1.879	0.00000451056	0.02250	0.003375	0.169	0.00000040500
	10 RAW-FRESH OR NFS						0.02250	0.000008	0.000	0.000000000096
	21 COOKED-NFS									
02006HA	ORANGES-PEEL	0.250	P	0.000034	0.002	0.00000000408	0.02250	0.000000	0.000	0.000000000000
	10 RAW-FRESH OR NFS						0.02250	0.000002	0.000	0.000000000024
	22 COOKED-FRESH-BAKED						0.02250	0.000001	0.000	0.000000000012
	31 COOKED-FRESH OR CANNED									
02006JA	ORANGES-JUICE	0.250	P	0.492627	24.631	0.00005911524	0.02250	0.042886	2.144	0.00000514632
	15 RAW-FRESH OR CANNED						0.02250	0.001450	0.073	0.00000017400
	31 COOKED-FRESH OR CANNED									
CROP GROUP TOTALS FOR CITRUS FRUITS:										
				0.598091	29.905	0.00007177092		0.053930	2.697	0.00000647160

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

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CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Simazine	Caswell #740	2yr feeding- rat	Reduction in weight gains	PADI UF -->300	Reproduction - rat	HED complete 04/25/86.			
	CAS No. 122-34-9	NOEL= 0.5200 mg/kg	hematological changes in	OPP Rfd= 0.002000	Teratology - rat	EPA verified 06/24/86.			
	A.I. CODE: 080807	LEL= 5.3000 mg/kg	females.	EPA Rfd= 0.002000		HED reassess 05/25/89.			
	CFR No. 180.213	100.00 ppm	Evidence of oncogenicity			EPA verified 06/15/89.			
		ONCO: Positive - 1 species	in rats; negative in mouse.	q*: 0.12000		On IRIS.			
COMMODITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 48 STATES									
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC TYPE (UG/KG/DAY)	TMRC %RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK
05005AA	PLUMS(DANSONS)-FRESH 10 RAW-FRESH OR NFS	0.250	P	0.006216	0.311	0.00000074592	0.01200	0.000223	0.011
	31 COOKED-FRESH OR CANNED					0.01200	0.000075	0.004	0.00000000900
05005DA	PLUMS-PRUNES(DRIED) 10 RAW-FRESH OR NFS	0.250	P	0.004355	0.218	0.00000052260	0.01200	0.000022	0.001
	21 COOKED-NFS					0.01200	0.000156	0.008	0.00000001872
	31 COOKED-FRESH OR CANNED					0.01200	0.000031	0.002	0.00000000372
05005JA	PLUMS, PRUNE-JUICE 10 RAW-FRESH OR NFS	0.250	P	0.004814	0.241	0.00000057768	0.01200	0.000231	0.012
	62 COOKED-FRESH OR FROZEN-BAKED					0.01200	0.000000	0.000	0.00000000000
CROP GROUP TOTALS FOR STONE FRUITS:									
				0.078643	3.932	0.00000943716	0.006191	0.310	0.00000074292
01002AA	BLACKBERRIES 10 RAW-FRESH OR NFS	0.250	P	0.001607	0.080	0.00000019284	0.05000	0.000040	0.002
	21 COOKED-NFS					0.05000	0.000142	0.007	0.00000001704
	62 COOKED-FRESH OR FROZEN-BAKED					0.05000	0.000139	0.007	0.00000001668
01003AA	BOYSENBERRIES 10 RAW-FRESH OR NFS	0.250	P	0.000183	0.009	0.00000002196	0.05000	0.000037	0.002
01004AA	DEWBERRIES 00 NOT SPECIFIED	0.250	P	0.000586	0.029	0.00000007032	0.05000	0.000117	0.006
01005AA	LOGANBERRIES 00 NOT SPECIFIED	0.250	P	0.000051	0.003	0.00000000612	0.05000	0.000102	0.005
01006AA	RASPBERRIES 10 RAW-FRESH OR NFS	0.250	P	0.000717	0.036	0.00000008604	0.05000	0.000086	0.004
	15 RAW-FRESH OR CANNED					0.05000	0.000016	0.001	0.0000000192
	31 COOKED-FRESH OR CANNED					0.05000	0.000014	0.001	0.0000000168
	62 COOKED-FRESH OR FROZEN-BAKED					0.05000	0.000014	0.001	0.0000000168
	70 RAW-FROZEN					0.05000	0.000013	0.001	0.0000000156
01009AA	BLUEBERRIES 10 RAW-FRESH OR NFS	0.250	P	0.002262	0.113	0.000000027144	0.05000	0.000268	0.013
	21 COOKED-NFS					0.05000	0.000054	0.003	0.00000000648
	62 COOKED-FRESH OR FROZEN-BAKED					0.05000	0.000024	0.001	0.00000000288
01010AA	CRANBERRIES 10 RAW-FRESH OR NFS	0.250	P	0.003753	0.188	0.000000045036	0.05000	0.000106	0.005
	21 COOKED-NFS					0.05000	0.000032	0.002	0.00000000384
	31 COOKED-FRESH OR CANNED					0.05000	0.000011	0.000	0.00000000012
01010JA	CRANBERRIES-JUICE 15 RAW-FRESH OR CANNED	0.250	P	0.004697	0.235	0.000000056364	0.05000	0.000718	0.036
	31 COOKED-FRESH OR CANNED					0.05000	0.000935	0.047	0.00000001220
						0.05000	0.000004	0.000	0.00000000048

2.0 x 10⁻⁷

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

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CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Simazine Caswell #740 CAS No. 122-34-9 A.I. CODE: 080807 CFR No. 180.213		2yr feeding- rat NOEL= 0.5200 mg/kg 10.00 ppm LEL= 5.3000 mg/kg 100.00 ppm ONCO: Positive - 1 species	Reduction in weight gains hematological changes in females. Evidence of oncogenicity in rats; negative in mouse.	PADI UF -->300 OPP RfD= 0.002000 EPA RfD= 0.002000 Q*: 0.12000	Reproduction - rat Teratology - rat	HED complete 04/25/86. EPA verified 06/24/86. HED reassess 05/25/89. EPA verified 06/15/89. On IRIS.

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)		TMRC (UG/KG/DAY)		TMRC ONCO RISK		ANTICIPATED RESIDUE (PPM)		ARC (UG/KG/DAY)		ARC ONCO RISK	
		TYPE		TYPE		%RFD		%RFD		%RFD		%RFD	
01011AA	CURRENTS 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED	0.250	P	0.000137		0.007	0.00000001644	0.05000	0.000001	0.000000	0.00000000000	0.000	0.000000000012
01014AA	GRAPES-FRESH 10 RAW-FRESH OR NFS 21 COOKED-NFS 31 COOKED-FRESH OR CANNED	0.250	P	0.010948		0.547	0.00000131376	0.05000	0.000425	0.000014	0.00000000000	0.021	0.0000000000100
01014DA	GRAPES-RAISINS 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED	0.250	P	0.018246		0.912	0.00000218952	0.05000	0.000072	0.000328	0.00000000000	0.016	0.00000000003936
01014JA	GRAPES-JUICE 10 RAW-FRESH OR NFS 15 RAW-FRESH OR CANNED 21 COOKED-NFS	0.250	P	0.027029		1.351	0.00000324348	0.05000	0.000769	0.000435	0.00000000000	0.038	0.00000000009228
01016AA	STRAWBERRIES 10 RAW-FRESH OR NFS 21 COOKED-NFS 70 RAW-FROZEN	0.250	P	0.008677		0.434	0.00000104124	0.05000	0.000176	0.001647	0.00000019764	0.082	0.00000000000840
CROP GROUP TOTALS FOR SMALL FRUITS AND BERRIES:													0.00000102732
15004AA	CORN, POP 21 COOKED-NFS	0.250	P	0.001693		0.085	0.00000020316	0.05000	0.000014	0.000000	0.00000000000	0.001	0.0000000000168
15005AA	CORN, SWEET 10 RAW-FRESH OR NFS 21 COOKED-NFS 31 COOKED-FRESH OR CANNED	0.250	P	0.059177		2.959	0.00000710124	0.05000	0.000000	0.000997	0.00000011964	0.050	0.00000000000000
24002EA	CORN, GRAIN-ENDOSPERM 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED 23 COOKED-FRESH-BOILED	0.250	P	0.041350		2.068	0.00000496200	0.05000	0.000001	0.000044	0.00000000000	0.009	0.0000000000232
24002HA	CORN, GRAIN-BRAN 00 NOT SPECIFIED	0.250	P	0.000000		0.000	0.00000000000	0.05000	0.000000	0.000000	0.00000000000	0.000	0.0000000000012
24002SA	CORN SUGAR 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED	0.250	P	0.036437		1.822	0.00000437244	0.05000	0.000011	0.000253	0.00000000000	0.002	0.0000000000528
270020A	CORN, GRAIN-OIL 18 PROCESSED OIL	0.250	P	0.005700		0.285	0.00000068400	0.05000	0.000027	0.000027	0.00000000000	0.013	0.00000000003036
								0.05000	0.000046	0.000046	0.00000000000	0.001	0.0000000000324
								0.05000	0.000046	0.000046	0.00000000000	0.002	0.0000000000552

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Simazine Caswell #740 CAS No. 122-34-9 A.I. CODE: 080807 CFR No. 180.213	2yr feeding- rat NOEL= 0.5200 mg/kg 10.00 ppm LEL= 5.3000 mg/kg 100.00 ppm ONCO: Positive - 1 species	Reduction in weight gains hematological changes in females. Evidence of oncogenicity in rats; negative in mouse.	PAD1 UF -->300 OPP RfD= 0.002000 EPA RfD= 0.002000 q*: 0.12000	Reproduction - rat Teratology - rat	HED complete 04/25/86. EPA verified 06/24/86. HED reassess 05/25/89. EPA verified 06/15/89. On IRIS.

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

COMMUNITY CONTRIBUTION BY RAC FOR: U.S. POPULATION - 40 STATES													
FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)		TMRC (UG/KG/DAY)		TMRC ONCO RISK		ANTICIPATED RESIDUE (PPM)		ARC (UG/KG/DAY)		ARC ONCO RISK	
CROP GROUP TOTALS FOR CEREAL GRAINS:													
03001AA	ALMONDS			0.14357	7.218	0.00001732284		0.001865	0.093		0.00000022380		
	10 RAW-FRESH OR NFS	0.250	P	0.000701	0.035	0.00000008412		0.000059	0.003		0.00000000708		
	21 COOKED-NFS							0.000042	0.002		0.00000000504		
	22 COOKED-FRESH-BAKED							0.000025	0.001		0.00000000300		
03005AA	FILBERTS, HAZELNUTS	0.250	P	0.000099	0.005	0.00000001188		0.000035	0.002		0.00000000420		
	10 RAW-FRESH OR NFS							0.000003	0.000		0.00000000036		
	21 COOKED-NFS							0.000002	0.000		0.00000000024		
	22 COOKED-FRESH-BAKED												
03007AA	MACADAMIA NUTS (BUSH NUTS)	0.250	P	0.000012	0.001	0.00000000144		0.000005	0.000		0.00000000060		
	10 RAW-FRESH OR NFS												
03008AA	PECANS	0.100	P	0.000482	0.024	0.00000005784		0.01000	0.000		0.00000000084		
	10 RAW-FRESH OR NFS							0.01000	0.000		0.00000000012		
	21 COOKED-NFS							0.01000	0.001		0.00000000132		
	22 COOKED-FRESH-BAKED							0.01000	0.001		0.00000000276		
	23 COOKED-FRESH-BOILED							0.01000	0.000		0.00000000072		
	62 COOKED-FRESH OR FROZEN-BAKED												
03009AA	WALNUTS	0.200	P	0.000965	0.048	0.00000011580		0.05000	0.004		0.00000000864		
	10 RAW-FRESH OR NFS							0.05000	0.000		0.00000000024		
	21 COOKED-NFS							0.000167	0.008		0.00000002004		
	22 COOKED-FRESH-BAKED												
CROP GROUP TOTALS FOR TREE NUTS:													
53001BA	BEEF-MEAT BYPRODUCTS	0.020	P	0.000353	0.018	0.00000004236		0.00010	0.000		0.00000000024		
	21 COOKED-NFS							0.00010	0.000		0.00000000000		
53001BB	BEEF(ORGAN MEATS)-OTHER	0.020	P	0.000121	0.006	0.00000001452		0.00010	0.000		0.00000000012		
	21 COOKED-NFS							0.00010	0.000		0.00000000000		
	51 COOKED-CANNED												
53001DA	BEEF-DRIED	0.020	P	0.000051	0.003	0.00000000612		0.00010	0.000		0.00000000000		
	21 COOKED-NFS												
53001FA	BEEF(BONELESS)-FAT (BEEF TALLOW)	0.020	P	0.007442	0.372	0.000000089304		0.00010	0.000		0.00000000000		
	10 RAW-FRESH OR NFS							0.00010	0.001		0.00000000180		
	21 COOKED-NFS							0.00010	0.000		0.00000000024		
	22 COOKED-FRESH-BAKED							0.00010	0.000		0.00000000036		
	23 COOKED-FRESH-BOILED							0.00010	0.001		0.00000000168		
	24 COOKED-FRESH-FRIED							0.00010	0.000		0.00000000024		
	25 COOKED-FRESH-FRIED												

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	CAS No. 122-34-9	NOEL= 0.5200 mg/kg	hematological changes in females.	OPP Rfd= 0.002000	Teratology - rat	EPA verified 06/24/86.
	A.I. CODE: 080807	LEL= 5.3000 mg/kg	Evidence of oncogenicity in rats; negative in mouse.	EPA Rfd= 0.002000		HED reassess 05/25/89.
	CFR No. 180.213	ONCO: Positive - 1 species		Q*: 0.12000		EPA verified 06/15/89.
						On IRIS.

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TYPE	TMRC (UG/KG/DAY)	%RFD	TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)	ARC (UG/KG/DAY)	%RFD	ARC ONCO RISK
53001KA	BEEF(ORGAN MEATS)-KIDNEY 21 COOKED-NFS	0.020	P	0.000010	0.001	0.000000000120	0.00020	0.000000	0.000	0.000000000000
53001LA	BEEF(ORGAN MEATS)-LIVER 25 COOKED-FRESH-FRIED	0.020	P	0.000414	0.021	0.000000004968	0.00060	0.000012	0.001	0.00000000144
53001MA	BEEF(ORGAN MEATS)-LIVER 31 COOKED-FRESH OR CANNED	0.020	P	0.000414	0.021	0.000000004968	0.00060	0.000000	0.000	0.000000000000
53001MA	BEEF(ORGAN MEATS)-LIVER 10 RAW-FRESH OR NFS	0.020	P	0.000414	0.021	0.000000004968	0.00060	0.000000	0.000	0.000000000000
53002BA	GOAT-MEAT BYPRODUCTS 21 COOKED-NFS	0.020	P	0.000000	0.000	0.000000000000	0.00010	0.000000	0.000	0.000000000000
53002BB	GOAT-MEAT BYPRODUCTS 00 NOT SPECIFIED	0.020	P	0.000000	0.000	0.000000000000	0.00010	0.000000	0.000	0.000000000000
53002FA	GOAT(ORGAN MEATS)-FAT 23 COOKED-FRESH-FRIED	0.020	P	0.000001	0.000	0.000000000012	0.00010	0.000000	0.000	0.000000000000
53002KA	GOAT(ORGAN MEATS)-KIDNEY 00 NOT SPECIFIED	0.020	P	0.000000	0.000	0.000000000000	0.00010	0.000000	0.000	0.000000000000
53002LA	GOAT(ORGAN MEATS)-LIVER 00 NOT SPECIFIED	0.020	P	0.000000	0.000	0.000000000000	0.00010	0.000000	0.000	0.000000000000
53002MA	GOAT(ORGAN MEATS)-LIVER 23 COOKED-FRESH-FRIED	0.020	P	0.000004	0.000	0.000000000048	0.00020	0.000000	0.000	0.000000000000
53003AA	HORSE 00 NOT SPECIFIED	0.020	P	0.000000	0.000	0.000000000000	0.00060	0.000000	0.000	0.000000000000
53005BA	SHEEP-MEAT BYPRODUCTS 21 COOKED-NFS	0.020	P	0.000001	0.000	0.000000000012	0.00010	0.000000	0.000	0.000000000000
53005BB	SHEEP(ORGAN MEATS)-OTHER 21 COOKED-NFS	0.020	P	0.000000	0.000	0.000000000000	0.00010	0.000000	0.000	0.000000000000
53005FA	SHEEP(ORGAN MEATS)-FAT 21 COOKED-NFS	0.020	P	0.000086	0.004	0.00000001032	0.00010	0.000000	0.000	0.000000000000
53005KA	SHEEP(ORGAN MEATS)-KIDNEY 21 COOKED-NFS	0.020	P	0.000000	0.000	0.000000000000	0.00010	0.000000	0.000	0.000000000000
53005LA	SHEEP(ORGAN MEATS)-LIVER 00 NOT SPECIFIED	0.020	P	0.000000	0.000	0.000000000000	0.00010	0.000000	0.000	0.000000000000
53005MA	SHEEP(ORGAN MEATS)-LIVER 21 COOKED-NFS	0.020	P	0.000250	0.013	0.00000003000	0.00020	0.000000	0.000	0.000000000000
53006BA	PORK-MEAT BYPRODUCTS 21 COOKED-NFS	0.020	P	0.000502	0.025	0.00000006024	0.00060	0.000000	0.000	0.000000000000

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

CHEMICAL INFORMATION		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Simazine	Caswell #740	2yr feeding- rat	NOEL= 0.5200 mg/kg 10.00 ppm LEL= 5.3000 mg/kg 100.00 ppm ONCO: Positive - 1 species	Reduction in weight gains in females. Evidence of oncogenicity in rats; negative in mouse.	PADI UF -->300 OPP RfD= 0.002000 EPA RfD= 0.002000 q*: 0.12000	Reproduction - rat Teratology - rat	HED complete 04/25/86. EPA verified 06/24/86. HED reassess 05/25/89. EPA verified 06/15/89. On IRIS.				
	CAS No. 122-34-9										
	A.I. CODE: 080807										
	CFR No. 180.213										

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)		TMRC (UG/KG/DAY)		TMRC ONCO RISK		ANTICIPATED RESIDUE (PPM)		ARC (UG/KG/DAY)		ARC ONCO RISK	
		TYPE	P	TYPE	P	%RFD	0.0000000000	%RFD	0.0000000000	%RFD	0.0000000000	%RFD	0.0000000000
530068B	PORK(ORGAN MEATS)-OTHER 21 COOKED-NFS	0.020	P	0.000077		0.004	0.0000000000	0.00010	0.000000	0.000	0.0000000000	0.000	0.0000000000
53006FA	26 COOKED-FRESH-PICKLED, CORNED, OR CURED PORK(BONELESS)-FAT (INCLUDING LARD) 10 RAW-FRESH OR NFS 21 COOKED-NFS	0.020	P	0.004164		0.208	0.000000049968	0.00010	0.000000	0.000	0.0000000000	0.000	0.0000000000
53006KA	23 COOKED-FRESH-BOILED 25 COOKED-FRESH-FRIED 26 COOKED-FRESH-PICKLED, CORNED, OR CURED PORK(ORGAN MEATS)-KIDNEY 21 COOKED-NFS	0.020	P	0.000000		0.000	0.000000000000	0.00010	0.000006	0.000	0.0000000000	0.000	0.0000000000
53006LA	21 COOKED-NFS 25 COOKED-FRESH-FRIED PORK(ORGAN MEATS)-LIVER	0.020	P	0.000096		0.005	0.00000001152	0.00060	0.000003	0.000	0.0000000000	0.000	0.0000000000
53006MA	25 COOKED-FRESH-FRIED PORK(BONELESS)-LEAN (W/O REMOVEABLE FAT) 21 COOKED-NFS 25 COOKED-FRESH-FRIED 26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.020	P	0.007825		0.391	0.000000093900	0.00010	0.000018	0.001	0.00000000216	0.001	0.00000000000
CROP GROUP TOTALS FOR RED MEAT: = 2.8 x 10 ⁻⁸												0.012	0.00000002796
55008BA	TURKEY-BYPRODUCTS 21 COOKED-NFS 26 COOKED-FRESH-PICKLED, CORNED, OR CURED	0.020	P	0.000005		0.000	0.000000000060	0.00030	0.000000	0.000	0.00000000000	0.000	0.00000000000
55008LA	TURKEY-GIBLETS (LIVER) 21 COOKED-NFS	0.020	P	0.000001		0.000	0.000000000012	0.00040	0.000000	0.000	0.00000000000	0.000	0.00000000000
55008MA	25 COOKED-FRESH-FRIED TURKEY-FLESH(W/O SKIN, W/O BONES) 21 COOKED-NFS	0.020	P	0.000159		0.008	0.000000001908	0.00030	0.000001	0.000	0.000000000012	0.000	0.00000000000
55008MB	31 COOKED-FRESH OR CANNED 62 COOKED-FRESH OR FROZEN-BAKED TURKEY-FLESH(+SKIN, W/O BONES) 21 COOKED-NFS	0.020	P	0.000963		0.048	0.000000011556	0.00030	0.000001	0.000	0.000000000012	0.000	0.00000000000
55008MC	25 COOKED-FRESH-FRIED TURKEY-UNSPECIFIED	0.020	P	0.000002		0.000	0.000000000024	0.00030	0.000000	0.000	0.00000000000	0.000	0.00000000000
55013BA	21 COOKED-NFS POULTRY, OTHER-BYPRODUCTS	0.020	P	0.000000		0.000	0.000000000000	0.00030	0.000000	0.000	0.00000000000	0.000	0.00000000000
55013LA	00 NOT SPECIFIED POULTRY, OTHER-GIBLETS(LIVER) 25 COOKED-FRESH-FRIED	0.020	P	0.000005		0.000	0.000000000060	0.00040	0.000000	0.000	0.00000000000	0.000	0.00000000000
55013MA	POULTRY, OTHER-FLESH (+SKIN, W/O BONES) 21 COOKED-NFS	0.020	P	0.000108		0.005	0.00000001296	0.00030	0.000002	0.000	0.000000000024	0.000	0.00000000000

DATE: 02/19/91

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

CHEMICAL INFORMATION		STUDY TYPE		EFFECTS		REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS	
Simazine	Caswell #740	2yr feeding- rat	Reduction in weight gains	PADI UF -->300	Reproduction - rat	HED complete 04/25/86.					
CAS No. 122-34-9	NOEL= 0.5200 mg/kg	hematological changes in	OPP RfD= 0.002000	Teratology - rat	EPA verified 06/24/86.						
A.I. CODE: 080807	LEL= 5.3000 mg/kg	Evidence of oncogenicity	EPA RfD= 0.002000		HED reassess 05/25/89.						
CPR No. 180.213	100.00 ppm	in rats; negative in	Q*: 0.12000		EPA verified 06/15/89.						
	ONCO: Positive - 1 species	mouse.			On IRIS.						

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	EFFECTS		TMRD	REFERENCE DOSES		ANTICIPATED RESIDUE (PPM)	ARC		ARC ONCO RISK
			TYPE	(UG/KG/DAY)		%RFD	ONCO RISK		(UG/KG/DAY)	%RFD	
55015BA	CHICKEN-BYPRODUCTS	0.020	P	0.000000	0.000	0.000000000000	0.00030	0.000000	0.000	0.000000000000	0.000000000000
55015LA	00 NOT SPECIFIED	0.020	P	0.000101	0.005	0.00000001212	0.00040	0.000000	0.000	0.000000000000	0.000000000000
	CHICKEN-GIBLETS(LIVER)						0.00040	0.000002	0.000	0.000000000024	0.000000000000
	21 COOKED-NFS						0.00040	0.000000	0.000	0.000000000000	0.000000000000
55015MA	25 COOKED-FRESH-FRIED	0.020	P	0.001203	0.060	0.00000014436	0.00030	0.000012	0.001	0.000000000144	0.000000000144
	26 COOKED-FRESH-PICKLED, CORNED, OR CURED						0.00030	0.000002	0.000	0.000000000024	0.000000000024
	CHICKEN-FLESH(W/O SKIN, W/O BONES)						0.00030	0.000001	0.000	0.000000000001	0.000000000001
	21 COOKED-NFS						0.00030	0.000001	0.000	0.000000000001	0.000000000001
	22 COOKED-FRESH-BAKED						0.00030	0.000002	0.000	0.000000000024	0.000000000024
	25 COOKED-FRESH-FRIED						0.00030	0.000001	0.000	0.000000000001	0.000000000001
55015MB	31 COOKED-FRESH OR CANNED	0.020	P	0.007586	0.379	0.00000091032	0.00030	0.000062	0.003	0.00000000744	0.00000000744
	53 COOKED-CANNED-BOILED						0.00030	0.000052	0.003	0.00000000624	0.00000000624
	CHICKEN-FLESH(+SKIN, W/O BONES)						0.00030	0.000062	0.003	0.00000000744	0.00000000744
	21 COOKED-NFS						0.00030	0.000052	0.003	0.00000000624	0.00000000624
	25 COOKED-FRESH-FRIED						0.00030	0.000052	0.003	0.00000000624	0.00000000624
CROP GROUP TOTALS FOR POULTRY:				0.010133	0.507	0.00000121596	0.000154	0.000154	0.008	0.000001848	0.000001848
53010AA	FISH-UNSPECIFIED	12.000	P	0.004948	0.247	0.00000059376	0.46800	0.000193	0.010	0.0000002316	0.0000002316
53016AA	21 COOKED-NFS						0.46800	0.007008	0.350	0.00000084096	0.00000084096
	FISH-FRESHWATER FINFISH	12.000	P	0.357918	17.896	0.00004295016	0.46800	0.006951	0.348	0.00000083412	0.00000083412
	21 COOKED-NFS						0.46800	0.006951	0.348	0.00000083412	0.00000083412
	25 COOKED-FRESH-FRIED						0.46800	0.006951	0.348	0.00000083412	0.00000083412
CROP GROUP TOTALS FOR FISH:				0.362866	18.143	0.00004354392	0.014152	0.014152	0.708	0.00000169824	0.00000169824
50000DB	MILK-NON-FAT SOLIDS	0.020	P	0.142727	7.136	0.00001712724	0.00007	0.000399	0.020	0.0000004788	0.0000004788
	10 RAW-FRESH OR NFS						0.00007	0.000081	0.004	0.0000000972	0.0000000972
	21 COOKED-NFS						0.00007	0.000018	0.001	0.00000000216	0.00000000216
	51 COOKED-CANNED						0.00007	0.000018	0.001	0.00000000216	0.00000000216
50000FA	MILK-FAT SOLIDS	0.020	P	0.067896	3.395	0.00000814752	0.00007	0.000186	0.009	0.0000002232	0.0000002232
	10 RAW-FRESH OR NFS						0.00007	0.000050	0.003	0.0000000600	0.0000000600
	21 COOKED-NFS						0.00007	0.000001	0.000	0.00000000012	0.00000000012
	51 COOKED-CANNED						0.00007	0.000001	0.000	0.00000000012	0.00000000012
50000SA	MILK SUGAR (LACTOSE)	0.020	P	0.000749	0.037	0.00000008988	0.00007	0.000000	0.000	0.00000000000	0.00000000000
	21 COOKED-NFS						0.00007	0.000003	0.000	0.00000000036	0.00000000036
	51 COOKED-CANNED						0.00007	0.000003	0.000	0.00000000036	0.00000000036
55014AA	EGGS-WHOLE	0.020	P	0.011290	0.565	0.00000135480	0.00030	0.000001	0.000	0.00000000012	0.00000000012
	10 RAW-FRESH OR NFS						0.00030	0.000001	0.000	0.00000000012	0.00000000012
	21 COOKED-NFS						0.00030	0.000001	0.000	0.00000000012	0.00000000012
	22 COOKED-FRESH-BAKED						0.00030	0.000001	0.000	0.00000000012	0.00000000012

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

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DATE: 02/19/91

CHEMICAL INFORMATION		STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
Simazine	Caswell #740 CAS No. 122-34-9 A.I. CODE: 080807 CFR No. 180.213	2yr feeding- rat NOEL= 0.5200 mg/kg 10.00 ppm LEL= 5.3000 mg/kg 100.00 ppm ONCO: Positive - 1 species	Reduction in weight gains in females. Evidence of oncogenicity in rats; negative in mouse.	PADI UF -->300 OPP RfD= 0.002000 EPA RfD= 0.002000	Reproduction - rat Teratology - rat	HED complete 04/25/86. EPA verified 06/24/86. HED reassess 05/25/89. EPA verified 06/15/89.	On IRIS.

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

FOOD CODE	FOODNAME/FOODFORM	TOLERANCE (PPM)	TMRC (UG/KG/DAY)		TMRC ONCO RISK	ANTICIPATED RESIDUE (PPM)		ARC (UG/KG/DAY)	ARC ONCO RISK
			TYPE	TYPE		%RFD	%RFD		
55014AB	23 COOKED-FRESH-BOILED 25 COOKED-FRESH-FRIED EGGS-WHITE ONLY 10 RAW-FRESH OR NFS 21 COOKED-NFS 22 COOKED-FRESH-BAKED 62 COOKED-FRESH OR FROZEN-BAKED 81 COOKED-FROZEN	0.020	P	0.000184	0.009	0.000000002208	0.00030 0.00030	0.000007 0.000049	0.000 0.002
55014AC	EGGS-YOLK ONLY 10 RAW-FRESH OR NFS 21 COOKED-NFS 25 COOKED-FRESH-FRIED 31 COOKED-FRESH OR CANNED	0.020	P	0.000133	0.007	0.000000001596	0.00030 0.00030 0.00030 0.00030 0.00030	0.000000 0.000001 0.000001 0.000001 0.000000	0.000 0.000 0.000 0.000 0.000
CROP GROUP TOTALS FOR DAIRY PRODUCTS:					11.149	0.00002675748	0.000911	0.046	0.00000010932

GRAND TOTALS FOR U.S. POPULATION - 48 STATES

2.485155 124.258 0.00029821860 0.113360 5.668 0.00001360320

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