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8-31-89

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

AUG 31 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Dietary Exposure Analysis for the Proposed Use of Carbaryl (Sevin) on Barley Grain, PP#8F3584

FROM: J. R. Tomerlin, Ph.D. *J.R. Tomerlin 8/29/89*
HED/SACB/TAS Staff (H7509C)

THRU: Reto Engler, Ph.D. *Reto Engler*
Chief, Science Analysis and Coordination Branch
Health Effects Division (H7509C)

TO: Dennis Edwards, PM 12
Insecticide-Rodenticide Branch
Registration Division (H7505C)

Action Requested

Provide an estimate of exposure to carbaryl (Sevin) from published tolerances and the proposed use on barley grain.

Discussion

1. Toxicology Endpoint: The routine chronic TAS analysis used a reference dose of 0.1 mg/kg body weight/day, based upon a NOEL of 10.0 mg/kg body weight/day and an uncertainty factor of 100 from a two year rat feeding study. The reference dose value is pending because of data gaps.
2. Residue Information: Food uses evaluated were published tolerances from 40 CFR 180.169 and the proposed tolerance on barley (M. J. Nelson memo, 4/4/1989). Secondary residues of carbaryl in meat, milk, eggs, and poultry resulting from the proposed use on barley are not expected to exceed the published tolerances (F. D. Griffith memo, 5/9/88). Tolerance values were adjusted for per cent crop treated (PQUA, R. Holtorf, 10/87 as updated by K. Griffin, 8/9/89). For those crops for which the usage estimate is less than 10 per cent, 10 per cent crop treated was assumed to allow for seasonal variation in the amount of carbaryl applied (personal communication, K. Griffin). Note that the per cent crop treated data included an estimate that less than one per cent of the barley crop is treated with carbaryl. Consequently, an estimate of 10 per cent crop treated was also used for barley. A summary of the residue data used in the analysis is attached as Table 1.

Carbaryl (Sevin) Dietary Exposure Analysis, page 2

3. Chronic Exposure Analysis: The TAS chronic exposure analysis uses tolerance level residues and 100 per cent crop treated to estimate the Theoretical Maximum Residue Contribution (TMRC) for the overall U.S. population and 22 population subgroups. The Anticipated Residue Contribution (ARC) is an exposure estimate calculated using either anticipated residue data or residue estimates adjusted for per cent of crop treated. The TMRC and ARC exposure estimates for the overall U.S. population and all 22 TAS population groups are shown in Table 2. The exposure estimates for the overall U.S. population, non-nursing infants, and children aged 1 to 6 are summarized in the following table.

TMRC and ARC Exposure Estimates for Carbaryl

TMRC

Published Tolerances	0.092005 ^a 92.0 ^b	0.293963 294.0	0.215166 215.2
PP#8F3584	0.000860 0.9	0.002093 2.1	0.000170 0.2
TMRC TOTAL	0.092910 92.9	0.296056 296.1	0.215336 215.3

ARC

Published Tolerances	0.015070 15.1	0.047583 47.6	0.033795 33.8
PP#8F3584	0.000086 0.1	0.000209 0.2	0.000017 < 0.1
TOTAL	0.015156 15.2	0.047792 47.8	0.033812 33.8

^aExposure estimate in mg/kg body weight/day.

^bEstimated exposure expressed as a percentage of the reference dose.

4. Comments: The use of per cent crop treated data considerably reduced the exposure estimates that were calculated. The most highly exposed TAS population group had an exposure equivalent to 47.8 per cent of the reference dose, using the ARC. Even assuming that 100 per cent of the barley crop contains tolerance level residues, exposure is equivalent to no more than 2.2 per cent of the reference dose for any TAS population group.

Carbaryl (Sevin) Dietary Exposure Analysis, page 3

Note that the toxicological data base contains critical data gaps. Consequently, the interpretation of these exposure estimates may need to be revised pending receipt and review of additional data.

Attachments

cc: TAS (Tomerlin, SACB), DEB, Caswell #160, Landolt (TOX-IRB)

Table 1

ANTICIPATED RESIDUE INFORMATION FOR CASHWELL NUMBER 160										DATE: 08/09/89	PAGE: 1
FOOD CODE	FOOD	FOOD FORM	PET. #	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)	EFFECTS		STATUS
									CHEMICAL	STUDY TYPE	
01002AA	BLACKBERRIES	10 RAW-FRESH OR NFS	368	P 12.00000	12.000000		10.00	1.200000	Carbaryl	2-yr feeding- rat	DATA GAPS/COMMENTS
01002AA	BLACKBERRIES	21 COOKED-NFS	368	P 12.00000	12.000000		10.00	1.200000	Cashwell #160	NOEL= 10.0000 mg/kg	Pending HED review.
01002AA	BLACKBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	368	P 12.00000	12.000000		10.00	1.200000	CAS No. 63-25-2	200.00 ppm	EPA verified 05/31/85.
01003AA	BOYSENBERRIES	10 RAW-FRESH OR NFS	368	P 12.00000	12.000000		10.00	1.200000	A.I. CODE: 056801	LEL= 20.0000 mg/kg	WHO last reviewed 1973.
01004AA	DEWBERRIES	00 NOT SPECIFIED (NO CONSUMPTION)	368	P 12.00000	12.000000		10.00	1.200000	CFR No. 180.169	400.00 ppm	
01005AA	LOCANBERRIES	00 NOT SPECIFIED (NO CONSUMPTION)	368	P 12.00000	12.000000		10.00	1.200000			
01006AA	RASPBERRIES	10 RAW-FRESH OR NFS	368	P 12.00000	12.000000		10.00	1.200000			
01006AA	RASPBERRIES	15 RAW-FRESH OR CANNED	368	P 12.00000	12.000000		10.00	1.200000			
01006AA	RASPBERRIES	31 COOKED-FRESH OR CANNED	368	P 12.00000	12.000000		10.00	1.200000			
01006AA	RASPBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	368	P 12.00000	12.000000		10.00	1.200000			
01006AA	RASPBERRIES	70 RAW-FROZEN	368	P 12.00000	12.000000		10.00	1.200000			
01009AA	BLUEBERRIES	10 RAW-FRESH OR NFS	281	P 10.00000	10.000000		10.00	1.000000			
01009AA	BLUEBERRIES	21 COOKED-NFS	281	P 10.00000	10.000000		10.00	1.000000			
01009AA	BLUEBERRIES	22 COOKED-FRESH-BAKED	281	P 10.00000	10.000000		10.00	1.000000			
01009AA	BLUEBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.00000	10.000000		10.00	1.000000			
01010AA	CRANBERRIES	10 RAW-FRESH OR NFS	281	P 10.00000	10.000000		10.00	1.000000			
01010AA	CRANBERRIES	21 COOKED-NFS	281	P 10.00000	10.000000		10.00	1.000000			
01010AA	CRANBERRIES	31 COOKED-FRESH OR CANNED	281	P 10.00000	10.000000		10.00	1.000000			
01010AA	CRANBERRY-JUICE	15 RAW-FRESH OR CANNED	281	P 10.00000	10.000000		10.00	1.000000			
01010AA	CRANBERRY-JUICE	31 COOKED-FRESH OR CANNED	281	P 10.00000	10.000000		10.00	1.000000			
01010AA	CRANBERRY-JUICE	10 RAW-FRESH OR NFS	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-FRESH	21 COOKED-NFS	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-FRESH	31 COOKED-FRESH OR CANNED	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-RAISINS	10 RAW-FRESH OR NFS	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-RAISINS	21 COOKED-NFS	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-RAISINS	22 COOKED-FRESH-BAKED	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-JUICE	10 RAW-FRESH OR NFS	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-JUICE	15 RAW-FRESH OR CANNED	203	P 10.00000	10.000000		20.00	2.000000			
01014AA	GRAPES-JUICE	21 COOKED-NFS	203	P 10.00000	10.000000		20.00	2.000000			
01016AA	STRAWBERRIES	10 RAW-FRESH OR NFS	222	P 10.00000	10.000000		30.00	3.000000			
01016AA	STRAWBERRIES	21 COOKED-NFS	222	P 10.00000	10.000000		30.00	3.000000			
01016AA	STRAWBERRIES	70 RAW-FROZEN	222	P 10.00000	10.000000		30.00	3.000000			
02001AA	CITRUS CITRON	22 COOKED-FRESH-BAKED	313	P 10.00000	10.000000		10.00	1.000000			
02002AA	GRAPEFRUIT-UNSP	00 NOT SPECIFIED (NO CONSUMPTION)	313	P 10.00000	10.000000		10.00	1.000000			
02002AB	GRAPEFRUIT-PULP	10 RAW-FRESH OR NFS	313	P 10.00000	10.000000		10.00	1.000000			
02002AB	GRAPEFRUIT-PULP	21 COOKED-NFS	313	P 10.00000	10.000000		10.00	1.000000			
02002JA	GRAPEFRUIT-JUICE	15 RAW-FRESH OR CANNED	313	P 10.00000	10.000000		10.00	1.000000			
02002JA	GRAPEFRUIT-JUICE	31 COOKED-FRESH OR CANNED	313	P 10.00000	10.000000		10.00	1.000000			
02003AA	KUMQUATS	10 RAW-FRESH OR NFS	313	P 10.00000	10.000000		10.00	1.000000			
02004AA	LEMONS-UNSPEC	10 RAW-FRESH OR NFS	313	P 10.00000	10.000000		10.00	1.000000			

Table 1, continued

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DATE: 08/09/89

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 160

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Carbaryl	4 yr feeding- rat		UF -->100	Data gaps, critical study	Pending HED review.
Caswell #160	NOEL= 10.0000 mg/kg		OPP RfD= 0.100000	need to be reviewed by	EPA verified 05/31/85.
CAS No. 63-25-2	200.00 ppm		EPA RfD= 0.000000	HED RfD committee.	WHO last reviewed 1973.
A.I. CODE: 056801	LEL= 20.0000 mg/kg				
CPR No. 180.169	400.00 ppm				
	ONCO:				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)
02004AA	LEMONS-UNSPEC	22 COOKED-FRESH-BAKED	313	P 10.00000	10.00000		10.00	1.000000
02004AB	LEMONS-PULP	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02004AB	LEMONS-PULP	31 COOKED-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
02004HA	LEMONS-PEEL	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02004HA	LEMONS-PEEL	21 COOKED-NFS	313	P 10.00000	10.00000		10.00	1.000000
02004JA	LEMONS-JUICE	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02004JA	LEMONS-JUICE	15 RAW-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
02004JA	LEMONS-JUICE	21 COOKED-NFS	313	P 10.00000	10.00000		10.00	1.000000
02004JA	LEMONS-JUICE	31 COOKED-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
02005AA	LIMES-UNSPEC	00 NOT SPECIFIED (NO CONSUMPTION)	313	P 10.00000	10.00000		10.00	1.000000
02005AB	LIMES-PULP	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02005HA	LIMES-PEEL	21 COOKED-NFS	313	P 10.00000	10.00000		10.00	1.000000
02005JA	LIMES-JUICE	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02005JA	LIMES-JUICE	15 RAW-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
02005JA	LIMES-JUICE	31 COOKED-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
02006AA	ORANGES-UNSPEC	00 NOT SPECIFIED (NO CONSUMPTION)	313	P 10.00000	10.00000		10.00	1.000000
02006AB	ORANGES-PULP	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02006HA	ORANGES-PEEL	21 COOKED-NFS	313	P 10.00000	10.00000		10.00	1.000000
02006HA	ORANGES-PEEL	21 COOKED-NFS	313	P 10.00000	10.00000		10.00	1.000000
02006HA	ORANGES-PEEL	22 COOKED-FRESH-BAKED	313	P 10.00000	10.00000		10.00	1.000000
02006HA	ORANGES-PEEL	31 COOKED-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
02006JA	ORANGES-JUICE	15 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02006JA	ORANGES-JUICE	31 COOKED-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
02007AA	TANGELOS	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02008AA	TANGERINES	10 RAW-FRESH OR NFS	313	P 10.00000	10.00000		10.00	1.000000
02008JA	TANGERINE-JUICE	15 RAW-FRESH OR CANNED	313	P 10.00000	10.00000		10.00	1.000000
03001AA	ALMONDS	10 RAW-FRESH OR NFS	329	P 1.000000	1.000000		36.00	0.360000
03001AA	ALMONDS	21 COOKED-NFS	329	P 1.000000	1.000000		36.00	0.360000
03001AA	ALMONDS	22 COOKED-FRESH-BAKED	7E1974	P 1.000000	1.000000		36.00	0.360000
03004AA	CHESTNUTS	21 COOKED-NFS	277	P 1.000000	1.000000		10.00	0.100000
03005AA	FILBERTS	10 RAW-FRESH OR NFS	277	P 1.000000	1.000000		10.00	0.100000
03005AA	FILBERTS	21 COOKED-NFS	277	P 1.000000	1.000000		10.00	0.100000
03005AA	FILBERTS	22 COOKED-FRESH-BAKED	3E1324	P 1.000000	1.000000		10.00	0.100000
03008AA	PECANS	10 RAW-FRESH OR NFS	3E1324	P 1.000000	1.000000		10.00	0.100000
03008AA	PECANS	21 COOKED-NFS	3E1324	P 1.000000	1.000000		10.00	0.100000
03008AA	PECANS	22 COOKED-FRESH-BAKED	3E1324	P 1.000000	1.000000		10.00	0.100000
03008AA	PECANS	23 COOKED-FRESH-BOTTLED	3E1324	P 1.000000	1.000000		10.00	0.100000
03008AA	PECANS	62 COOKED-FRESH OR FROZEN-BAKED	329	P 1.000000	1.000000		36.00	0.360000
03009AA	WALNUTS	10 RAW-FRESH OR NFS	329	P 1.000000	1.000000		36.00	0.360000
03009AA	WALNUTS	21 COOKED-NFS	329	P 1.000000	1.000000		36.00	0.360000

CHEMICAL		STUDY TYPE		EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS
FOOD CODE	FOOD	FOOD FORM	PET. #	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)	
03009AA	WALNUTS	22 COOKED-FRESH-BAKED	329	P 1.000000	1.000000		36.00	0.360000	
03011AA	PISTACHIO NUTS	10 RAW-FRESH OR NFS	9E2153	P 1.000000	1.000000		36.00	0.360000	
04001AA	APPLES-FRESH	10 RAW-FRESH OR NFS	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001AA	APPLES-FRESH	21 COOKED-NFS	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001AA	APPLES-FRESH	31 COOKED-FRESH OR CANNED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001AA	APPLES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001DA	APPLES-DRIED	10 RAW-FRESH OR NFS	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001DA	APPLES-DRIED	22 COOKED-FRESH-BAKED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001DA	APPLES-DRIED	62 COOKED-FRESH OR FROZEN-BAKED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001JA	APPLES-JUICE	15 RAW-FRESH OR CANNED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04001JA	APPLES-JUICE	31 COOKED-FRESH OR CANNED	5E3291	P 10.000000	10.000000		10.00	1.000000	
04002AA	CRABAPPLES	00 NOT SPECIFIED (NO CONSUMPTION)	5E3291	P 10.000000	10.000000		20.00	2.000000	
04003AA	PEARS-FRESH	10 RAW-FRESH OR NFS	5E3291	P 10.000000	10.000000		20.00	2.000000	
04003AA	PEARS-FRESH	31 COOKED-FRESH OR CANNED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04003AA	PEARS-FRESH	51 COOKED-CANNED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04003AA	PEARS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	5E3291	P 10.000000	10.000000		20.00	2.000000	
04003DA	PEARS-DRIED	10 RAW-FRESH OR NFS	5E3291	P 10.000000	10.000000		20.00	2.000000	
04003DA	PEARS-DRIED	21 COOKED-NFS	5E3291	P 10.000000	10.000000		10.00	1.000000	
04004AA	QUINCES	00 NOT SPECIFIED (NO CONSUMPTION)	5E3291	P 10.000000	10.000000		10.00	1.000000	
05001AA	APRICOTS-FRESH	10 RAW-FRESH OR NFS	281	P 10.000000	10.000000		10.00	1.000000	
05001AA	APRICOTS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05001AA	APRICOTS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05001DA	APRICOTS-DRIED	10 RAW-FRESH OR NFS	281	P 10.000000	10.000000		10.00	1.000000	
05001DA	APRICOTS-DRIED	22 COOKED-FRESH-BAKED	222	P 10.000000	10.000000		20.00	2.000000	
05002AA	CHERRIES-FRESH	10 RAW-FRESH OR NFS	222	P 10.000000	10.000000		20.00	2.000000	
05002AA	CHERRIES-FRESH	21 COOKED-NFS	222	P 10.000000	10.000000		20.00	2.000000	
05002AA	CHERRIES-FRESH	31 COOKED-FRESH OR CANNED	222	P 10.000000	10.000000		20.00	2.000000	
05002AA	CHERRIES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	222	P 10.000000	10.000000		20.00	2.000000	
05002DA	CHERRIES-DRIED	00 NOT SPECIFIED (NO CONSUMPTION)	222	P 10.000000	10.000000		20.00	2.000000	
05002JA	CHERRIES-JUICE	15 RAW-FRESH OR CANNED	222	P 10.000000	10.000000		20.00	2.000000	
05002JA	CHERRIES-JUICE	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05003AA	NECTARINES	10 RAW-FRESH OR NFS	193	P 10.000000	10.000000		20.00	2.000000	
05004AA	PEACHES-FRESH	10 RAW-FRESH OR NFS	193	P 10.000000	10.000000		20.00	2.000000	
05004AA	PEACHES-FRESH	21 COOKED-NFS	193	P 10.000000	10.000000		20.00	2.000000	
05004AA	PEACHES-FRESH	31 COOKED-FRESH OR CANNED	193	P 10.000000	10.000000		20.00	2.000000	
05004AA	PEACHES-FRESH	51 COOKED-CANNED	193	P 10.000000	10.000000		20.00	2.000000	
05004DA	PEACHES-DRIED	10 RAW-FRESH OR NFS	193	P 10.000000	10.000000		20.00	2.000000	
05004DA	PEACHES-DRIED	21 COOKED-NFS	222	P 10.000000	10.000000		20.00	2.000000	
05005AA	PLUMS-FRESH	10 RAW-FRESH OR NFS	222	P 10.000000	10.000000		20.00	2.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	222	P 10.000000	10.000000		20.00	2.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	222	P 10.000000	10.000000		20.00	2.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	222	P 10.000000	10.000000		20.00	2.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	222	P 10.000000	10.000000		20.00	2.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	222	P 10.000000	10.000000		20.00	2.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	15 RAW-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	21 COOKED-NFS	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	281	P 10.000000	10.000000		10.00	1.000000	
05005AA	PLUMS-FRESH	51 COOKED-CANNED	281	P 10.000000	10.000000		10.00	1.000000	
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ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 160

FOOD CODE	FOOD	CHEMICAL	STUDY TYPE		EFFECTS	TOLERANCE (ppm)		ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
			2-yr feeding - rat	NOEL =		PET. #	PPM				
05005DA	PLUMS-PRUNES	Carbaryl	10 RAW-FRESH OR NFS	10,0000 mg/kg	UF -->100	222	P 10.00000	10.000000		20.00	2.000000
05005DA	PLUMS-PRUNES	Caswell #160	21 COOKED-NFS	200.00 ppm	OPP RfD= 0.100000	222	P 10.00000	10.000000		20.00	2.000000
05005DA	PLUMS-PRUNES	CAS No. 63-25-2	31 COOKED-FRESH OR CANNED	200.00 ppm	EPA RfD= 0.000000	222	P 10.00000	10.000000		20.00	2.000000
05005JA	PRUNE-JUICE	A.I. CODE: 056801	10 RAW-FRESH OR NFS	100.00 ppm		222	P 10.00000	10.000000		20.00	2.000000
05005JA	PRUNE-JUICE		62 COOKED-FRESH OR FROZEN-BAKED			222	P 10.00000	10.000000		10.00	1.000000
06001AA	AVOCADOS		10 RAW-FRESH OR NFS			5E3292	P 10.00000	10.000000		10.00	1.000000
06002AA	BANANAS-UNSPEC		22 COOKED-FRESH-BAKED			231	P 10.00000	10.000000		10.00	1.000000
06002AB	BANANAS-FRESH		10 RAW-FRESH OR NFS			231	P 10.00000	10.000000		10.00	1.000000
06002AB	BANANAS-FRESH		21 COOKED-NFS			231	P 10.00000	10.000000		10.00	1.000000
06002AB	BANANAS-FRESH		31 COOKED-FRESH OR CANNED			231	P 10.00000	10.000000		10.00	1.000000
06002AB	BANANAS-FRESH		10 RAW-FRESH OR NFS			231	P 10.00000	10.000000		10.00	1.000000
06002DA	BANANAS-DRIED		21 COOKED-NFS			231	P 10.00000	10.000000		10.00	1.000000
06002DA	BANANAS-DRIED		00 NOT SPECIFIED (NO CONSUMPTION)			5E3291	P 10.00000	10.000000		10.00	1.000000
06008AA	LOQUATS		10 RAW-FRESH OR NFS			337	P 10.00000	10.000000		10.00	1.000000
06009AA	OLIVES		11 RAW-FRESH-PICKLED, CORNED, OR CURED			337	P 10.00000	10.000000		10.00	1.000000
06009AA	OLIVES		21 COOKED-NFS			337	P 10.00000	10.000000		10.00	1.000000
06009AA	OLIVES		10 RAW-FRESH OR NFS			5E3208	P 2.000000	2.000000		10.00	0.200000
06013AA	PINEAPPLE-PULP		21 COOKED-NFS			5E3208	P 2.000000	2.000000		10.00	0.200000
06013AA	PINEAPPLE-PULP		31 COOKED-FRESH OR CANNED			5E3208	P 2.000000	2.000000		10.00	0.200000
06013AA	PINEAPPLE-PULP		10 RAW-FRESH OR NFS			5E3208	P 2.000000	2.000000		10.00	0.200000
06013JA	PINEAPPLE-DRIED		10 RAW-FRESH OR NFS			5E3208	P 2.000000	2.000000		10.00	0.200000
06013JA	PINEAPPLE-JUICE		15 RAW-FRESH OR CANNED			5E3208	P 2.000000	2.000000		10.00	0.200000
06013JA	PINEAPPLE-JUICE		21 COOKED-NFS			5E3208	P 2.000000	2.000000		10.00	0.200000
06013JA	PINEAPPLE-JUICE		31 COOKED-FRESH OR CANNED			5E3208	P 2.000000	2.000000		10.00	0.200000
06013JA	PINEAPPLE-JUICE		21 COOKED-NFS			231	P 10.00000	10.000000		10.00	1.000000
06016AA	PLANTAINS		23 COOKED-FRESH-BOILED			231	P 10.00000	10.000000		10.00	1.000000
06016AA	PLANTAINS		25 COOKED-FRESH-FRIED			231	P 10.00000	10.000000		10.00	1.000000
08015AA	DILL		00 NOT SPECIFIED (NO CONSUMPTION)			7E3543	P 0.200000	0.200000		100.00	0.200000
08022AA	HORSERADISH		11 RAW-FRESH-PICKLED, CORNED OR CURED			368	P 5.000000	5.000000		10.00	0.500000
08048DA	PAPRIKA		00 NOT SPECIFIED (NO CONSUMPTION)			228	P 10.00000	10.000000		10.00	1.000000
10002AA	CANTALOUPE-UNSP		00 NOT SPECIFIED (NO CONSUMPTION)			318	P 10.00000	10.000000		10.00	1.000000
10002AB	CANTALOUPE-PULP		10 RAW-FRESH OR NFS			318	P 10.00000	10.000000		10.00	1.000000
10002AB	CANTALOUPE-PULP		21 COOKED-NFS			318	P 10.00000	10.000000		10.00	1.000000
10003AA	CASABAS		10 RAW-FRESH OR NFS			318	P 10.00000	10.000000		10.00	1.000000
10004AA	CRENSHAW'S		00 NOT SPECIFIED (NO CONSUMPTION)			318	P 10.00000	10.000000		10.00	1.000000
10005AA	HONEYDEW MELONS		10 RAW-FRESH OR NFS			318	P 10.00000	10.000000		30.00	3.000000
10007AA	PERSION MELONS		00 NOT SPECIFIED (NO CONSUMPTION)			318	P 10.00000	10.000000		10.00	1.000000
10008AA	WATERMELON		10 RAW-FRESH OR NFS			318	P 10.00000	10.000000		10.00	1.000000
10008AA	WATERMELON		21 COOKED-NFS			318	P 10.00000	10.000000		10.00	1.000000
10010AA	CUCUMBERS		10 RAW-FRESH OR NFS			318	P 10.00000	10.000000		10.00	1.000000

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Table 1, continued

CHEMICAL			STUDY TYPE		EFFECTS	TOLERANCE		ANTICIPATED		DATA GAPS/COMMENTS		STATUS	
FOOD CODE	FOOD	FOOD FORM	PET. #	(ppm)	RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	IN TAS RUN (ppm)	RES. VALUE USED				
Carbaryl		2yr testing - 100000 ppm											
Caswell #160		NOPE - 100000 ppm											
CAS No. 63-25-2		200.00 ppm											
A.I. CODE: 056901		SEL - 20.0000 mg/kg											
CFR No. 120.169		400.00 ppm											
		ONCE											
								</					

ASSOCIATED PRESS INFORMATION FOR CASWELL NUMBER 160

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ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 160

CHEMICAL	TOLERANCE TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS	STATUS
			UF	-->100		
Carbaryl	2yr feeding- Rat		OPP RfD=	0.100000	Data gaps, critical study need to be reviewed by HED RfD committee.	Pending HED review.
Caswell #160	NOEL=	10 0000 mg/kg	EPA RfD=	0.000000		EPA verified 05/31/85.
CAS No. 63-25-2		200.00 ppm				WHO last reviewed 1973.
A.I. CODE: 059801	LEL=	20.0000 mg/kg				
CFR No. 180.16a		400.00 ppm				On IRIS.
	CFR					

FOOD CODE	FOOD	PET. #	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
24001AA	BARLEY	8F3584	N 15.00000	15.0000000		10.00	1.500000
24002EA	CORN, GRAIN-ENTO	443	P 5.000000	5.000000		10.00	0.500000
24002EA	CORN, GRAIN-ENTO	443	P 5.000000	5.000000		10.00	0.500000
24002EA	CORN, GRAIN-ENTO	443	P 5.000000	5.000000		10.00	0.500000
24002EA	CORN, GRAIN-ENTO	443	P 5.000000	5.000000		10.00	0.500000
24002EA	CORN, GRAIN-ENTO	443	P 5.000000	5.000000		10.00	0.500000
24002HA	CORN, GRAIN-BRAN	443	P 5.000000	5.000000		10.00	0.500000
24002SA	CORN SUGAR	443	P 5.000000	5.000000		10.00	0.500000
24002SA	CORN SUGAR	443	P 5.000000	5.000000		10.00	0.500000
24002SA	CORN SUGAR	443	P 5.000000	5.000000		10.00	0.500000
24004AA	RICE-ROUGH	302	P 5.000000	5.000000		10.00	0.500000
24004AA	RICE-ROUGH	302	P 5.000000	5.000000		10.00	0.500000
24004AB	RICE-MILLED	302	P 5.000000	5.000000		10.00	0.500000
24004AB	RICE-MILLED	302	P 5.000000	5.000000		10.00	0.500000
24004AB	RICE-MILLED	302	P 5.000000	5.000000		10.00	0.500000
24004AB	RICE-MILLED	302	P 5.000000	5.000000		10.00	0.500000
24006AA	SORGHUM	302	P 10.00000	10.000000		10.00	1.000000
24007AA	WHEAT-ROUGH	7F1878	P 3.000000	3.000000		10.00	0.300000
24007AA	WHEAT-ROUGH	7F1878	P 3.000000	3.000000		10.00	0.300000
24007AA	WHEAT-ROUGH	7F1878	P 3.000000	3.000000		10.00	0.300000
24007AA	WHEAT-ROUGH	7F1878	P 3.000000	3.000000		10.00	0.300000
24007GA	WHEAT-CERM	7F1878	P 3.000000	3.000000		10.00	0.300000
24007GA	WHEAT-CERM	7F1878	P 3.000000	3.000000		10.00	0.300000
24007HA	WHEAT-BRAN	7F1878	P 3.000000	3.000000		10.00	0.300000
24007HA	WHEAT-BRAN	7F1878	P 3.000000	3.000000		10.00	0.300000
24007WA	WHEAT-FLOUR	7F1878	P 3.000000	3.000000		10.00	0.300000
24007WA	WHEAT-FLOUR	7F1878	P 3.000000	3.000000		10.00	0.300000
24007WA	WHEAT-FLOUR	7F1878	P 3.000000	3.000000		10.00	0.300000
24012AA	MILLET	1E2497	P 3.000000	3.000000		10.00	0.300000
24012AA	MILLET	1E2497	P 3.000000	3.000000		10.00	0.300000
25004SA	MAPLE SYRUP	6E1796	P 0.500000	0.500000		10.00	0.050000
25004SA	MAPLE SYRUP	6E1796	P 0.500000	0.500000		10.00	0.050000
27002OA	CORN, GRAIN-OIL	443	P 5.000000	5.000000		10.00	0.500000
27003OA	COTTONSEED-OIL	212	P 5.000000	5.000000		10.00	0.500000
27003OA	COTTONSEED-OIL	212	P 5.000000	5.000000		10.00	0.500000
27004AA	FLAX SEED	1E2498	P 5.000000	5.000000		10.00	0.500000
27007OA	PEANUTS-OIL	302	P 5.000000	5.000000		10.00	0.500000
27010OA	SOYBEANS-OIL	302	P 5.000000	5.000000		10.00	0.500000
27011OA	SUNFLOWER-OIL	5E1564	P 1.000000	1.000000		10.00	0.100000

RESIDUE INFORMATION FOR CASWELL NUMBER 160

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ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 160

CHEMICAL			STUDY TYPE	EFFECTS	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)	STATUS
Carbaryl	2y feeding rat									Pending HED review
Caswell #160	NFEL= 10.0000 mg/kg									EPA verified 05/31/85.
CAS No. 63-25-2	200.00 ppm									WHO last reviewed 1973.
A.I. CODE: 056801	LEL= 20.0000 mg/kg									
CFR No. 180.169	400.00 ppm									
	CNCO:									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)		
53001MA	BEEF-LEAN	10 RAW-FRESH OR NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53001MA	BEEF-LEAN	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53001MA	BEEF-LEAN	22 COOKED-FRESH-BAKED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53001MA	BEEF-LEAN	23 COOKED-FRESH-BOILED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53001MA	BEEF-LEAN	24 COOKED-FRESH-BROILED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53002BA	GOAT-MEAT BYP	00 NOT SPECIFIED (NO CONSUMPTION)	7F1878	P 0.100000	0.100000		10.00	0.010000		
53002BB	GOAT-OTH ORGAN	00 NOT SPECIFIED (NO CONSUMPTION)	7F1878	P 0.100000	0.100000		10.00	0.010000		
53002FA	GOAT-FAT	23 COOKED-FRESH-BOILED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53002FA	GOAT-FAT	25 COOKED-FRESH-FRIED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53002KA	GOAT-KIDNEY	00 NOT SPECIFIED (NO CONSUMPTION)	7H5154	P 1.000000	1.000000		10.00	0.100000		
53002LA	GOAT-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	7H5154	P 1.000000	1.000000		10.00	0.100000		
53002MA	GOAT-LEAN	23 COOKED-FRESH-BOILED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53002MA	GOAT-LEAN	25 COOKED-FRESH-FRIED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53003AA	HORSE	00 NOT SPECIFIED (NO CONSUMPTION)	7F1878	P 0.100000	0.100000		10.00	0.010000		
53005BA	SHEEP-MEAT BYP	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53005BB	SHEEP-OTH ORGAN	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53005FA	SHEEP-FAT	21 COOKED-NFS	7H5154	P 1.000000	1.000000		10.00	0.100000		
53005KA	SHEEP-KIDNEY	21 COOKED-NFS	7H5154	P 1.000000	1.000000		10.00	0.100000		
53005LA	SHEEP-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	7H5154	P 1.000000	1.000000		10.00	0.100000		
53005MA	SHEEP-LEAN	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53005MA	SHEEP-LEAN	31 COOKED-FRESH OR CANNED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006BA	PORK-MEAT BYP	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006BB	PORK-OTH ORGAN	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006BB	PORK-OTH ORGAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006FA	PORK-FAT	10 RAW-FRESH OR NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006FA	PORK-FAT	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006FA	PORK-FAT	23 COOKED-FRESH-BOILED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006FA	PORK-FAT	25 COOKED-FRESH-FRIED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006FA	PORK-FAT	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006KA	PORK-KIDNEY	21 COOKED-NFS	7H5154	P 1.000000	1.000000		10.00	0.100000		
53006KA	PORK-LIVER	21 COOKED-NFS	7H5154	P 1.000000	1.000000		10.00	0.100000		
53006LA	PORK-LIVER	25 COOKED-FRESH-FRIED	7H5154	P 1.000000	1.000000		10.00	0.100000		
53006MA	PORK-LEAN	21 COOKED-NFS	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006MA	PORK-LEAN	25 COOKED-FRESH-FRIED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53006MA	PORK-LEAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	7F1878	P 0.100000	0.100000		10.00	0.010000		
53013NA	FISH, SHELL	10 RAW-FRESH OR NFS	1E2554	P 0.250000	0.250000		10.00	0.025000		
53013NA	FISH, SHELL	21 COOKED-NFS	1E2554	P 0.250000	0.250000		10.00	0.025000		
53013NA	FISH, SHELL	25 COOKED-FRESH-FRIED	1E2554	P 0.250000	0.250000		10.00	0.025000		
55008BA	TURKEY-BYP	21 COVER-NFS	311	P 5.000000	5.000000		10.00	0.500000		
55009BA	TURKEY-BYP	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	311	P 5.000000	5.000000		10.00	0.500000		

Table 1, continued

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ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 160

CHEMICAL			STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS		STATUS
Carbaryl	2/yr feeding- rat				UF -->100	Data gaps, critical study	Pending HED review.	
Caswell #160	WEL= 10,000 ppm				OPP RfD= 0.100000	need to be reviewed by	EPA verified 05/31/85.	
CAS No. 63-25-2	200 to 1000				EPA RfD= 0.000000	HED RfD committee.	WHO last reviewed 1973.	
A.I. CODE: 056201	SEL= 20,000 ppm							
CFR No. 180.169	400.00 ppm						On IRIS.	
FOOD CODE	FOOD	PET. #	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)	
55009LA	TURKEY ORGAN	311	P 5.000000	5.000000		10.00	0.500000	
55009LA	TURKEY ORGAN	311	P 5.000000	5.000000		10.00	0.500000	
55008MA	TURKEY W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55008MA	TURKEY W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55008MA	TURKEY W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55008MA	TURKEY W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55008MB	TURKEY+SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55008MB	TURKEY+SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55008MC	TURKEY-UNSPEC	311	P 5.000000	5.000000		10.00	0.500000	
55013BA	POULTRY,OTH-BYP	311	P 5.000000	5.000000		10.00	0.500000	
55013LA	POULTRY,ORGAN	311	P 5.000000	5.000000		10.00	0.500000	
55013MA	POULTRY,OTHER	311	P 5.000000	5.000000		10.00	0.500000	
55014AA	EGGS-WHOLE	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AA	EGGS-WHOLE	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AA	EGGS-WHOLE	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AA	EGGS-WHOLE	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AB	EGGS-WHITE ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AB	EGGS-WHITE ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AB	EGGS-WHITE ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AB	EGGS-WHITE ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AB	EGGS-WHITE ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AC	EGGS-YOLK ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AC	EGGS-YOLK ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55014AC	EGGS-YOLK ONLY	3F1330	P 0.500000	0.500000		10.00	0.050000	
55015BA	CHICKEN-BYP	311	P 5.000000	5.000000		10.00	0.500000	
55015LA	CHICKEN-ORGAN	311	P 5.000000	5.000000		10.00	0.500000	
55015LA	CHICKEN-ORGAN	311	P 5.000000	5.000000		10.00	0.500000	
55015LA	CHICKEN-ORGAN	311	P 5.000000	5.000000		10.00	0.500000	
55015MA	CHICKEN-W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55015MA	CHICKEN-W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55015MA	CHICKEN-W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55015MA	CHICKEN-W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55015MA	CHICKEN-W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55015MA	CHICKEN-W/O SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55015MB	CHICKEN+SKIN	311	P 5.000000	5.000000		10.00	0.500000	
55015MB	CHICKEN+SKIN	311	P 5.000000	5.000000		10.00	0.500000	

Table 2

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 08/25/89

PAGE: 1

CHEMICAL INFORMATION			STUDY TYPE	EFFECTS	REFERENCE DOSES		DATA GAPS/COMMENTS		STATUS
Carbaryl	2yr feeding- rat				UF -->100		Data gaps, critical study	Pending HED review.	
Caswell #160	NOEL=	10,000 mg/kg			OPP RfD= 0.100000		need to be reviewed by	EPA verified 05/31/85.	
CAS No. 63-25-2		200.00 ppm			EPA RfD= 0.000000		HED RfD committee.	WHO last reviewed 1973.	
A.I. CODE: 056901	LEL=	20,000 mg/kg							
CFR No. 180.169		400.00 ppm							
	ONCO:							On IRIS.	
TOTAL TMR (MG/KG BODY WEIGHT/DAY)									
CURRENT TMR*				NEW TMR**		DIFFERENCE AS PERCENT OF RFD		EFFECT OF ANTICIPATED RESIDUES	
POPULATION SUBGROUP								ARC	
U.S. POPULATION - 48 STATES								SRFD	
U.S. POPULATION - SPRING SEASON				0.092005	0.092865	92.864581	0.859511	0.015156	15.15606
U.S. POPULATION - SUMMER SEASON				0.098721	0.089654	89.654416	0.933379	0.014535	14.53509
U.S. POPULATION - FALL SEASON				0.093369	0.094276	94.275999	0.906547	0.015477	15.47709
U.S. POPULATION - WINTER SEASON				0.092150	0.092963	92.963086	0.812880	0.015215	15.21467
				0.092435	0.093220	93.219634	0.785010	0.015256	15.25594
NORTHEAST REGION				0.101212	0.102406	102.405549	1.193757	0.016638	16.63832
NORTH CENTRAL REGION				0.088672	0.089497	89.497390	0.825341	0.014876	14.87641
SOUTHERN REGION				0.081813	0.082354	82.354040	0.541442	0.013078	13.07761
WESTERN REGION				0.100267	0.101277	101.277460	1.010533	0.016973	16.97279
HISPANICS				0.109825	0.110581	110.581135	0.755844	0.017528	17.52828
NON-HISPANIC WHITES				0.090844	0.091781	91.780780	0.937100	0.015303	15.30334
NON-HISPANIC BLACKS				0.086140	0.086539	86.539040	0.399072	0.012587	12.58688
NON-HISPANIC OTHERS				0.111489	0.112424	112.424327	0.934836	0.016977	16.97720
NURSING INFANTS. (< 1 YEAR OLD)				0.163743	0.164861	164.861370	1.118594	0.028191	28.19098
NON-NURSING INFANTS (< 1 YEAR OLD)				0.293963	0.296056	296.055529	2.092938	0.047792	47.79210
FEMALES (13+ YEARS, PREGNANT)				0.070429	0.070574	70.573745	0.144576	0.011796	11.79602
FEMALES 13+ YEARS, NURSING				0.080684	0.081252	81.251771	0.567902	0.013976	13.97569
CHILDREN (1-6 YEARS OLD)				0.215166	0.215336	215.336172	0.170370	0.033812	33.81178
CHILDREN (7-12 YEARS OLD)				0.131558	0.131665	131.664612	0.106137	0.021466	21.46630
MALES (13-19 YEARS OLD)				0.079591	0.080088	80.087784	0.496630	0.013271	13.27074
MALES (20 YEARS AND OLDER)				0.072141	0.072341	72.341373	0.200196	0.011947	11.94692
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)				0.063488	0.065677	65.677417	2.189551	0.010922	10.92217
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURSING)				0.068754	0.069218	69.218174	0.464157	0.011475	11.47493

*Current TMR does not include new or pending tolerances.

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