

9-13-96

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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SEP 13 1996

MEMORANDUM

SUBJECT: Addendum to Dietary Risk Assessment for the Chlorpyrifos Reregistration Eligibility Document

FROM: Stephen A. Schaible *Stephen A. Schaible*
Dietary Risk Evaluation Section
Science Analysis Branch/ Health Effects Division (7509C)

TO: John Redden, Chemical Manager
Risk Characterization and Analysis Branch
Health Effects Division (7509C)

THROUGH: Elizabeth A. Doyle, Section Head *E. Doyle*
Dietary Risk Evaluation Section
Science Analysis Branch/ Health Effects Division (7509C)

Action Requested

Provide a dietary exposure analysis to estimate chronic and acute dietary exposure and risk from chlorpyrifos for uses which are being supported through reregistration. This analysis updates the previous analysis supporting the chlorpyrifos RED (B. Steinwand memorandum to J. Redden dated 1/24/96).

Discussion

1. Toxicological Endpoints

Chronic exposure in this analysis was compared to a Reference Dose (RfD) of 0.003 mg/kg bw/day, based on a no observed effect level (NOEL) of 0.03 mg/kg bw/day and an uncertainty factor of 10. The NOEL is taken from a 20 day feeding study in humans; decreased plasma cholinesterase is the effect observed at the next highest dose level. This RfD was reviewed by the HED RfD Peer Review committee at their 11/20/95 meeting.

Chlorpyrifos has been classified as Group E by the HED Carcinogenicity Peer Review Committee. There is no evidence of carcinogenicity in either rats or mice.

The HED Toxicology Endpoint Selection Committee has determined that characterization

1/35

of acute dietary risk is required for this chemical (Toxicology Endpoint Selection Document, 4/29/96). Acute exposure estimates should be compared to a NOEL of 0.10 mg/kg bw/day, taken from a 28 day study in humans.

2. Residue Information

Food uses evaluated in the DRES chronic and acute analyses were those recommended in the Residue Chemistry Chapter of the RED (S. Knizner memorandum to J. Redden, 9/15/94). Published food uses for chlorpyrifos are listed in 40 CFR 180.342. Food additive tolerances and a tolerance for use of chlorpyrifos as a crack and crevice treatment in food handling establishments are found in 185.1000. The established tolerances are expressed either in terms of the combined residues of chlorpyrifos and its metabolite 3,5,6-trichloro-2-pyridinol (TCP) or as chlorpyrifos *per se*. The Agency has determined that the TCP metabolite of chlorpyrifos is not of toxicological concern and no longer needs to be regulated, and therefore, should be excluded from the tolerance expression (Knizner, 9/15/94). Reassessed tolerances reflect residues of chlorpyrifos *per se*, except where data were not available.

Following DRES policy for chronic exposure analyses, the food additive tolerance of 0.1 ppm for food handling establishments is applied to all raw agricultural commodities in DRES not already having a tolerance. If there is a specific food use tolerance listed in 180.342 or in 185.1000, that tolerance is reflected in the analysis instead of the food handling establishment (FHE) tolerance, regardless of whether or not the FHE tolerance is the higher of the two. The assumption is that the majority of exposure to the chemical would occur as a result of agricultural application, and not the food handling establishment use. In cases where tolerance revocations are recommended as part of the tolerance reassessment, the food handling establishment tolerance is assigned to those commodities instead of deleting them from the analysis. It should be noted that following HED acute dietary exposure guidelines (D. Edwards memorandum dated 6/13/96), the food handling establishment use of chlorpyrifos is not being considered in evaluating acute dietary risk from the chemical.

There are several commodities in the DRES chronic exposure analysis which have multiple records for a single raw agricultural commodity. There are multiple records for grapes, pears, nectarines, peaches, plums/prunes, tomatoes and lettuce. In the case of grapes, tomatoes and lettuce, these are pending petitions to increase the tolerance. By allowing two records, the first being the existing tolerance and the second being the incremental increase in residue posed by the proposed residue level (such that the cumulative residue of the two records equals the proposed higher tolerance), incremental increase in exposure and risk posed by the recommended increase can be determined. In the case of pears, nectarines, peaches and plums/prunes, the lower tolerance of 0.01 ppm reflects tolerances for domestic use of chlorpyrifos on these commodities and the higher residue of 0.04 ppm reflects the incremental increase posed by the 0.05 ppm import tolerance.

Percent of crop treated information is supplied by the Biological and Economic Analysis Division (table titled "Annual Chlorpyrifos Usage, 1987 to 1993 Data", generated by A. Grube) and used in the chronic exposure analysis. If information is not available for a commodity having a published tolerance, the default assumption of 100% crop treated is used; this includes uses which may have had percent of crop treated refinements reflected in previous DRES analyses but for which information was not supplied in the most recent BEAD submission. The default value

of 100% crop treated is assumed for all commodities assigned the food handling establishment tolerance.

Anticipated residue (AR) information supplied by Chemistry Branch II- Reregistration Support (CBRS) is used in both the chronic and acute exposure analyses. In the acute analysis, tolerance level residues or high end ARs are assumed, with the exception being the use of average ARs for those commodities considered to be mixed or blended in processing (Knizner memorandum to J. Redden dated 7/13/95). In the chronic analysis, tolerance level values or average ARs based on field trial data and processing studies were used. For both the acute and the chronic analyses, DRES default concentration factors were turned off if the ARs supplied already took into account concentration of residues in processed forms. A summary of the percent of crop treated and residue information used in the chronic analysis is attached as Attachment 1; the residue information used in the acute exposure analysis is attached as Attachment 2. Detailed assumptions used in interpreting residue and percent of crop treated information to the DRES residue files are attached as Appendix 1.

3. Results

Chronic Exposure

The DRES routine chronic exposure analysis assumes tolerance level residues and 100 percent crop treated in calculating the Theoretical Maximum Residue Contribution, or TMRC, for the U.S. population and 22 population subgroups. Anticipated residues and refined percent of crop treated information are used to calculate the Anticipated Residue Contribution (ARC). The ARC is considered the more accurate estimate of chronic dietary exposure. A summary of the TMRCs, ARCs, and their representations as percentages of the RfD are attached as Attachment 3.

The TMRC for the overall U.S. population from uses recommended in the RED is 0.006840 mg/kg bwt/day; this represents 228% of the RfD. The subgroup most highly exposed, non-nursing infants less than 1 year old, has a TMRC of 0.017552 mg/kg bwt/day, or 585% of the RfD.

The ARC for the overall U.S. population from uses recommended in the RED is 0.000946 mg/kg bwt/day, or 32% of the RfD. The subgroup most highly exposed, children aged one through six years old, has a ARC of 0.001870 mg/kg bwt/day, or 62% of the RfD.

Acute Exposure

The DRES detailed acute exposure analysis evaluates individual food consumption as reported by respondents in the 1977-78 Nationwide Food Consumption Survey and estimates the distribution of single day exposures throughout the diet for the U.S. population and select subgroups. The analysis assumes uniform distribution of chlorpyrifos in the commodity supply. The DRES analysis performed for this RED would be considered a Tier 2 risk assessment in the new acute dietary risk assessment policy (Edwards, 6/13/96).

The Margin of Exposure is a measure of how closely the calculated high end exposure from the analysis approaches the acute NOEL, and is calculated as the ratio of the NOEL to the high end exposure estimate. Since the toxicological effect to which exposure is being compared is plasma cholinesterase inhibition, risk is calculated for the U.S. population and all four DRES population subgroups available through the acute analysis. Given that the NOEL is taken from a human study, the Agency would generally not have concern unless the calculated MOE was

below 10.

Acute MOEs for the U.S. population and the four DRES population subgroups are supplied in the table below. The distributions of exposure and MOE calculations for these population groups are attached as Attachment 4.

Table 1: MOEs for Acute Dietary Exposure to Chlorpyrifos		
POPULATION	MOE (high end)	MOE (percentile)
U.S. population	3.3	10 (95th)
Infants (< 1 year old)	3.3	7.1 (96th)
Children (1 through 6 years)	2.5	5 (95th)
Females (13 years and over)	7.1	12.5 (96th)
Males (13 years and over)	7.1	12.5 (97th)

The calculated MOEs from this analysis indicate that chlorpyrifos in the diet represents an acute risk of concern for all subgroups when risk is evaluated using the high end (>99.5%ile) exposure estimates. Using percentile estimates down closer to the 95th percentile, risk is acceptable for the U.S. population, Males (13+ years) and Females (13+ years). Even at these lower percentiles, acute dietary MOEs appear to be of concern for infants and children.

Attachments

cc: DRES, CBRS, SRRD, RD (PM 19), Caswell # 219AA

Appendix 1

The following assumptions were made in translating the tolerance reassessment, the anticipated residue, and the percent of crop treated information to the DRES chronic and acute residue files for the chlorpyrifos RED. DRES chronic residue files are named 219AA.* and AR219AA.* and can be found in the REREGIST subdirectory of the DRES Bernoulli disks; the DRES acute residue file is found on the mainframe under the name PTAS.ACUTE.CHLORPYR.REREGIST. It should be noted that there were several instances where residue information was incorrectly interpreted to the DRES files in the previous analysis for the chlorpyrifos RED (Steinwand, 1/24/96) and that these corrections are also documented below.

Corrections to 1/24/96 analysis

- * tolerance and anticipated residue levels for tomatoes and grapes were incorrectly doubled. Under normal DRES policy, if a tolerance of 0.5 ppm existed for tomatoes and a proposal to increase the tolerance to 1.0 ppm were introduced to the file, this would be reflected by having two records for each tomato food form, each at 0.5 ppm (one published and one pending), such that the sum of the two entries equalled the tolerance being proposed. Likewise, if an AR of 0.04 ppm was supplied based on data supporting the recommended tolerance, 0.02 ppm would be assigned to each of the records such that their sum equalled the recommended AR. In the previous analysis, the recommended tolerances and ARs were entered for both records, thus doubling exposure for these crops.
- * in the tolerance and AR files, the records for the food handling establishment tolerance for lettuce were omitted. With correction, now there are two records for each lettuce entry- the proposed increase in tolerance of 0.9 ppm (AR= 0.235 ppm) and the published food handling establishment use of 0.1 ppm (AR= 0.005 ppm). The AR of 0.24 ppm was supplied in a N. Dodd memo dated 9/27/93. The recommended tolerance level of 1.0 ppm for lettuce was added to the acute residue file, where it had been previously omitted.
- * an AR of 0.047 ppm for "apples- cooked, fresh or canned" was inadvertently applied to raw apples in the 1/24/96 chronic analysis. This value was changed to the correct AR of 0.39 ppm.
- * missing food form records in the RED tolerance file for raisins and blueberries were added

Percent of crop treated assumptions

- * RACs previously having refined percent of crop treated estimates in the DRES file but not having information supplied in the most recent BEAD submission were assigned the DRES default value of 100% crop treated.
- * percent of crop treated estimates for pending uses on lettuce and grapes were changed to 100%; the percent crop treated estimates of 1% had been incorrectly applied these pending uses. The pending increase to the grape tolerance reflects an increase in scope of

application from regional level (the existing tolerance) to national level; usage data supplied to DRES for this RED would reflect only regional usage.

- * 100% crop treated was assumed for all food records in the file relating to the food handling establishment, as no information on percent of food establishments treated with chlorpyrifos was supplied. There are numerous RACs in the BEAD table which have percent of crop treated refinements supplied but for which no tolerances exist other than the food handling establishment tolerance; it is assumed that PCT estimates in these cases reflect Section 18s or special local need usage, and 100%CT was therefore applied to these records.
- * about a year ago tolerances on pears, plums/prunes, nectarines and peaches were raised from 0.01 ppm to 0.05 ppm so that the tolerance would cover residues on both domestic and imported foods. The incremental increase in tolerance for import use is reflected in the DRES chronic AR file as 0.04 ppm. Percent of crop treated data supplied by BEAD was applied only to the records for these RACs relating to domestic usage; 100% crop treated was assumed for those records relating to imported usage.
- * the percent of crop treated estimate for cabbage of 56% was also applied to chinese cabbage, replacing the 36% estimate that had previously been in the file; percent of crop treated estimates were not supplied for chinese cabbage in the most recent BEAD memo.

Residues

- * in those instances where an existing tolerance for a RAC was recommended to be revoked in the tolerance reassessment summary, that RAC was not removed from the file for the RED analysis, but was instead assigned the food handling establishment tolerance and AR, in accordance with DRES policy
- * the AR of 0.01 ppm for grape juice was also applied to "wine and sherry"
- * concentration factor suppressors in DRES ("H" in tolerance files, "C" in AR files) were removed from all "oil" records; they had been added previously, but DRES does not contain default concentration factors for oils, thus making these suppressors confusing and unnecessary
- * tolerances of 0.1 ppm for "corn, milled fractions" and 1.5 ppm for "wheat, milled fractions excluding flour" (both in CFR 185.1000) were added to the chronic tolerance and AR files and to the acute residue file; previously, only the 180.342 tolerances of 0.05 ppm (corn) and 0.5 ppm (wheat) had been reflected in the analysis. The use of the higher tolerance of 0.1 ppm for corn in the acute analysis runs counter to the value recommended in Knizner's 7/13/96 memo.
- * acute ARs supplied in S. Knizner's memo to J. Redden of 7/13/95 were also applied to the chronic AR files for those crops where tolerance level defaults were being used instead

(peanuts, soybeans, beet sugar, corn grain oil, cottonseed oil, peanut oil, soybean oil); these acute ARs were for mixed commodities and were therefore average anticipated residues also appropriate for use in chronic analyses.

* chronic and acute ARs for tomato puree were also applied to the "tomato-paste" and "tomato- catsup" in DRES

For ease of future work on this chemical, the following table lists the acute and chronic anticipated residues used in this analysis, with documentation of which Chemistry memo discussion of the AR is found in.

Table 1: Chronic and Acute ARs used in Chlorpyrifos Dietary Risk Assessment			
RAC	Chronic AR (ppm)	Acute AR (ppm)	Reference
grapes raisins juice/wine/sherry	0.24 0.04 0.01	0.12* 0.01	N. Dodd, 9/27/93; *CBRS comments to draft RED document
food handling establishment	0.005	N/A	M. Flood, 6/28/90
citrus pulp juice	0.1 0.015	0.015	S. Knizner, 7/13/95
apples whole, raw cooked, canned juice	0.39 0.047 0.062	0.047 0.062	Knizner, 7/13/95
peppers	0.14		N. Dodd, 9/27/93
tomatoes whole juice puree	0.19 0.006 0.02	0.006 0.02	N. Dodd, 9/27/93
lettuce	0.24		N. Dodd, 9/27/93
wheat grain bran flour	0.034 0.09 0.005	0.034 0.09 0.005	M. Flood, 8/10/92
cane sugar	0.01	0.01	J. Morales, 6/30/93
beet sugar	0.01	0.01	Knizner, 7/13/95

soybean grain oil	0.01 0.0014	0.01 0.0014	Knizner, 7/13/95; Knizner, 10/31/95
cottonseed oil	0.045	0.045	Knizner, 7/13/95
poultry	0.01		D. Edwards, 12/15/88
corn oil	0.15	0.15	Knizner, 7/13/95
sunflower seed oil	0.046 0.1	0.046 0.1	Knizner, 10/31/95; Knizner, 7/13/95
peanut nutmeat oil	0.01 0.02	0.01 0.02	Knizner, 10/31/95; Knizner, 7/13/95

Attachment 1: Residue Information for Chronic Exposure Analysis

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 219AA

DATE: 08/30/96

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg 0.00 ppm LEL= 0.1000 mg/kg 0.00 ppm ONCO: E (Rfd/Pr Committee)	Decreased plasma ChE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/Pr reviewed 09/09/93 RfD/Pr reviewed 05/25/95 RfD/Pr reviewed 11/20/95 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET. #	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN IAS RUN (ppm)
01002AA	BLACKBERRIES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01002AA	BLACKBERRIES	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01002AA	BLACKBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
01003AA	BOYSENBERRIES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01004AA	DEMIBERRIES	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
01005AA	LOGANBERRIES	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
01006AA	RASPBERRIES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01006AA	RASPBERRIES	15 RAW-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
01006AA	RASPBERRIES	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
01006AA	RASPBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
01006AA	RASPBERRIES	70 RAW-FROZEN	6H5505	P 0.100000	0.005000		100.00	0.005000
01007AA	YOUNGBERRIES	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
01009AA	BLUEBERRIES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01009AA	BLUEBERRIES	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01009AA	BLUEBERRIES	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
01009AA	BLUEBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
01010AA	CRANBERRIES	10 RAW-FRESH OR NFS	2E2682	P 1.000000	1.000000		87.00	0.870000
01010AA	CRANBERRIES	21 COOKED-NFS	2E2682	P 1.000000	1.000000		87.00	0.870000
01010AA	CRANBERRIES	31 COOKED-FRESH OR CANNED	2E2682	P 1.000000	1.000000		87.00	0.870000
01010AA	CRANBERRY-JUICE	15 RAW-FRESH OR CANNED	2E2682	P 1.000000	1.000000		87.00	0.870000
01010JA	CRANBERRY-JUICE	31 COOKED-FRESH OR CANNED	2E2682	P 1.000000	1.000000		87.00	0.870000
01011AA	CURRANTS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01011AA	CURRANTS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01011AA	CURRANTS	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
01012AA	ELDERBERRIES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
01013AA	GOOSEBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
01014AA	GRAPE-FRESH	10 RAW-FRESH OR NFS	2E2584	P 0.500000	0.120000		100.00	0.001200
01014AA	GRAPE-FRESH	21 COOKED-NFS	2E2584	P 0.500000	0.120000		100.00	0.001200
01014AA	GRAPE-FRESH	31 COOKED-FRESH OR CANNED	2E2584	P 0.500000	0.120000		100.00	0.001200
01014AA	GRAPE-FRESH	31 COOKED-FRESH OR CANNED	2E2584	P 0.500000	0.120000		100.00	0.001200
01014DA	GRAPE-RAISINS	10 RAW-FRESH OR NFS	2E2584	P 0.500000	0.020000		100.00	0.000200
01014DA	GRAPE-RAISINS	21 COOKED-NFS	2E2584	P 0.500000	0.020000		100.00	0.000200
01014DA	GRAPE-RAISINS	21 COOKED-NFS	2E2584	P 0.500000	0.020000		100.00	0.000200
01014DA	GRAPE-RAISINS	22 COOKED-FRESH-BAKED	2E2584	P 0.500000	0.020000		100.00	0.000200
01014DA	GRAPE-RAISINS	22 COOKED-FRESH-BAKED	2E2584	P 0.500000	0.020000		100.00	0.000200
01014JA	GRAPE-JUICE	10 RAW-FRESH OR NFS	2E2584	P 0.500000	0.020000		100.00	0.000200
01014JA	GRAPE-JUICE	10 RAW-FRESH OR NFS	2E2584	P 0.500000	0.005000		100.00	0.000500

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 2190A

DATE: 08/30/96

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #2190A CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg 0.00 ppm LEL= 0.1000 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Decreased plasma CHE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP Rfd= 0.003000 EPA Rfd= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 Rfd/PR reviewed 09/09/93 Rfd/PR reviewed 05/25/95 Rfd/PR reviewed 11/20/95 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)
01014JA	GRAPES-JUICE	15 RAW-FRESH OR CANNED	2E2584	P	0.500000	0.005000C	1.00	0.000050
01014JA	GRAPES-JUICE	15 RAW-FRESH OR CANNED	3E2872	A	0.500000	0.005000C	100.00	0.005000
01014JA	GRAPES-JUICE	21 COOKED-NFS	2E2584	P	0.500000	0.005000C	1.00	0.000050
01015AA	HUCKLEBERRIES	00 NOT SPECIFIED (NO CONSUMPTION)	3E2872	A	0.500000	0.005000C	100.00	0.005000
01016AA	STRAWBERRIES	10 RAW-FRESH OR NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
01016AA	STRAWBERRIES	21 COOKED-NFS	3E2884	P	0.200000	0.200000	40.00	0.080000
01016AA	STRAWBERRIES	70 RAW-FROZEN	3E2884	P	0.200000	0.200000	40.00	0.080000
01024AA	JUNEBERRY	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P	0.100000	0.005000	100.00	0.005000
01025AA	MULBERRIES	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P	0.100000	0.005000	100.00	0.005000
02001AA	CITRUS CITRON	22 COOKED-FRESH-BAKED	1E2575	P	1.000000	1.000000	54.00	0.054000
02002AA	GRAPEFRUIT-UNSP	00 NOT SPECIFIED (NO CONSUMPTION)	1E2575	P	1.000000	1.000000	49.00	0.490000
02002AB	GRAPEFRUIT-PULP	10 RAW-FRESH OR NFS	1E2575	P	1.000000	1.000000	49.00	0.049000
02002AB	GRAPEFRUIT-PULP	21 COOKED-NFS	1E2575	P	1.000000	1.000000	49.00	0.049000
02002JA	GRAPEFRUIT-JUICE	15 RAW-FRESH OR CANNED	1E2575	P	1.000000	1.000000	49.00	0.007350
02002JA	GRAPEFRUIT-JUICE	31 COOKED-FRESH OR CANNED	1E2575	P	1.000000	0.015000C	49.00	0.007350
02003AA	KUMQUATS	10 RAW-FRESH OR NFS	1E2575	P	1.000000	1.000000	100.00	0.100000
02004AA	LEMONS-UNSPEC	10 RAW-FRESH OR NFS	1E2575	P	1.000000	1.000000	49.00	0.490000
02004AA	LEMONS-UNSPEC	22 COOKED-FRESH-BAKED	1E2575	P	1.000000	1.000000	49.00	0.490000
02004AB	LEMONS-PULP	10 RAW-FRESH OR NFS	1E2575	P	1.000000	1.000000	49.00	0.049000
02004AB	LEMONS-PULP	31 COOKED-FRESH OR CANNED	1E2575	P	1.000000	1.000000	49.00	0.049000
02004HA	LEMONS-PEEL	10 RAW-FRESH OR NFS	1E2575	P	1.000000	1.000000	49.00	0.490000
02004JA	LEMONS-JUICE	10 RAW-FRESH OR NFS	1E2575	P	1.000000	0.015000C	49.00	0.007350
02004JA	LEMONS-JUICE	15 RAW-FRESH OR CANNED	1E2575	P	1.000000	0.015000C	49.00	0.007350
02004JA	LEMONS-JUICE	21 COOKED-NFS	1E2575	P	1.000000	0.015000C	49.00	0.007350
02004JA	LEMONS-JUICE	31 COOKED-FRESH OR CANNED	1E2575	P	1.000000	0.015000C	49.00	0.007350
02005AA	LIMES-UNSPEC	00 NOT SPECIFIED (NO CONSUMPTION)	1E2575	P	1.000000	1.000000	54.00	0.540000
02005AB	LIMES-PULP	10 RAW-FRESH OR NFS	1E2575	P	1.000000	1.000000	54.00	0.540000
02005HA	LIMES-PEEL	21 COOKED-NFS	1E2575	P	1.000000	1.000000	54.00	0.540000
02005JA	LIMES-JUICE	10 RAW-FRESH OR NFS	1E2575	P	1.000000	0.015000C	54.00	0.008100
02005JA	LIMES-JUICE	15 RAW-FRESH OR CANNED	1E2575	P	1.000000	0.015000C	54.00	0.008100
02005JA	LIMES-JUICE	31 COOKED-FRESH OR CANNED	1E2575	P	1.000000	0.015000C	54.00	0.008100
02006AA	ORANGES-UNSPEC	00 NOT SPECIFIED (NO CONSUMPTION)	1E2575	P	1.000000	1.000000	98.00	0.980000
02006AB	ORANGES-PULP	10 RAW-FRESH OR NFS	1E2575	P	1.000000	0.100000	98.00	0.098000
02006AB	ORANGES-PULP	21 COOKED-NFS	1E2575	P	1.000000	0.100000	98.00	0.098000
02006HA	ORANGES-PEEL	21 COOKED-NFS	1E2575	P	1.000000	1.000000	98.00	0.980000
02006HA	ORANGES-PEEL	22 COOKED-FRESH-BAKED	1E2575	P	1.000000	1.000000	98.00	0.980000
02006HA	ORANGES-PEEL	31 COOKED-FRESH OR CANNED	1E2575	P	1.000000	1.000000	98.00	0.980000
02006JA	ORANGES-JUICE	15 RAW-FRESH OR CANNED	1E2575	P	1.000000	0.015000C	98.00	0.014700

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 219AA

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEL = 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased Plasma Che. No other systemic effects identified. No evidence of carcinog- enicity in rats or mice.	ADI UF -->10 Opp RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
02006JA	ORANGES-JUICE	31 COOKED-FRESH OR CANNED	1F2575	P 1.000000	0.015000C	PROCESS. STUDY	98.00	0.014700
02007AA	TANGELOS	10 RAW-FRESH OR NFS	1F2575	P 1.000000	0.100000	PROCESS. STUDY	54.00	0.054000
02008AA	TANGERINES	10 RAW-FRESH OR NFS	1F2575	P 1.000000	0.100000	PROCESS. STUDY	54.00	0.054000
02008JA	TANGERINE-JUICE	15 RAW-FRESH OR CANNED	1F2575	P 1.000000	0.015000C	PROCESS. STUDY	54.00	0.008100
03001AA	ALMONDS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		52.00	0.104000
03001AA	ALMONDS	21 COOKED-NFS	4F2999	P 0.200000	0.200000		52.00	0.104000
03001AA	ALMONDS	22 COOKED-FRESH-BAKED	4F2999	P 0.200000	0.200000		52.00	0.104000
03002AA	BRAZIL NUTS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		100.00	0.200000
03002AA	BRAZIL NUTS	21 COOKED-NFS	4F2999	P 0.200000	0.200000		100.00	0.200000
03003AA	CASHEWS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		100.00	0.200000
03003AA	CASHEWS	21 COOKED-NFS	4F2999	P 0.200000	0.200000		100.00	0.200000
03004AA	CHESTNUTS	21 COOKED-NFS	4F2999	P 0.200000	0.200000		75.00	0.150000
03005AA	FILBERTS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		75.00	0.150000
03005AA	FILBERTS	21 COOKED-NFS	4F2999	P 0.200000	0.200000		75.00	0.150000
03006AA	FILBERTS	22 COOKED-FRESH-BAKED	4F2999	P 0.200000	0.200000		100.00	0.200000
03007AA	HICKORY NUTS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		100.00	0.200000
03008AA	MACADAMIA NUTS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		45.00	0.090000
03008AA	PECANS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		45.00	0.090000
03008AA	PECANS	21 COOKED-NFS	4F2999	P 0.200000	0.200000		45.00	0.090000
03008AA	PECANS	22 COOKED-FRESH-BAKED	4F2999	P 0.200000	0.200000		45.00	0.090000
03008AA	PECANS	23 COOKED-FRESH-BOILED	4F2999	P 0.200000	0.200000		45.00	0.090000
03008AA	PECANS	62 COOKED-FRESH OR FROZEN-BAKED	4F2999	P 0.200000	0.200000		45.00	0.090000
03009AA	WALNUTS	10 RAW-FRESH OR NFS	4F2999	P 0.200000	0.200000		60.00	0.120000
03009AA	WALNUTS	21 COOKED-NFS	4F2999	P 0.200000	0.200000		60.00	0.120000
03009AA	WALNUTS	22 COOKED-FRESH-BAKED	4F2999	P 0.200000	0.200000		60.00	0.120000
03010AA	BUTTER NUTS	00 NOT SPECIFIED (NO CONSUMPTION)	4F2999	P 0.200000	0.200000		100.00	0.200000
03011AA	PISTACHIO NUTS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
03013AA	BEECHNUTS	00 NOT SPECIFIED (NO CONSUMPTION)	4F2999	P 0.200000	0.200000		100.00	0.200000
04001AA	APPLES-FRESH	10 RAW-FRESH OR NFS	2F2620	P 1.500000	0.390000	FIELD TRIALS	63.00	0.245700
04001AA	APPLES-FRESH	21 COOKED-NFS	2F2620	P 1.500000	0.047000	FIELD TRIALS	63.00	0.029610
04001AA	APPLES-FRESH	31 COOKED-FRESH OR CANNED	2F2620	P 1.500000	0.047000	FIELD TRIALS	63.00	0.029610
04001AA	APPLES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	2F2620	P 1.500000	0.047000	FIELD TRIALS	63.00	0.029610
04001DA	APPLES-DRIED	10 RAW-FRESH OR NFS	2F2620	P 1.500000	0.390000	FIELD TRIALS	63.00	0.245700
04001DA	APPLES-DRIED	22 COOKED-FRESH-BAKED	2F2620	P 1.500000	0.047000	FIELD TRIALS	63.00	0.029610
04001DA	APPLES-DRIED	62 COOKED-FRESH OR FROZEN-BAKED	2F2620	P 1.500000	0.047000	FIELD TRIALS	63.00	0.029610
04001JA	APPLES-JUICE	15 RAW-FRESH OR CANNED	2F2620	P 1.500000	0.062000C	PROCESS. STUDY	63.00	0.039060
04001JA	APPLES-JUICE	31 COOKED-FRESH OR CANNED	2F2620	P 1.500000	0.062000C	PROCESS. STUDY	63.00	0.039060
04002AA	CRABAPPLES	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
04003AA	PEARS-FRESH	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		13.00	0.001300
04003AA	PEARS-FRESH	10 RAW-FRESH OR NFS	4E04288	P 0.040000	0.040000		100.00	0.040000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEL = 0.1000 mg/kg 0.00 ppm	Decreased plasma Che. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD = 0.003000 EPA RfD = 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
04003AA	PEARS-FRESH	31 COOKED-FRESH OR CANNED	3F2884	P 0.010000	0.010000		13.00	0.001300
04003AA	PEARS-FRESH	31 COOKED-FRESH OR CANNED	4E04288	P 0.040000	0.040000		100.00	0.040000
04003AA	PEARS-FRESH	51 COOKED-CANNED	3F2884	P 0.010000	0.010000		13.00	0.001300
04003AA	PEARS-FRESH	51 COOKED-CANNED	4E04288	P 0.040000	0.040000		100.00	0.040000
04003AA	PEARS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	3F2884	P 0.010000	0.010000		13.00	0.001300
04003AA	PEARS-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	4E04288	P 0.040000	0.040000		100.00	0.040000
04003DA	PEARS-DRIED	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		13.00	0.001300
04003DA	PEARS-DRIED	10 RAW-FRESH OR NFS	4E04288	P 0.040000	0.040000		100.00	0.040000
04003DA	PEARS-DRIED	21 COOKED-NFS	3F2884	P 0.010000	0.010000		13.00	0.001300
04003DA	PEARS-DRIED	21 COOKED-NFS	4E04288	P 0.040000	0.040000		100.00	0.040000
05001AA	APRICOTS-FRESH	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
05001AA	APRICOTS-FRESH	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
05001AA	APRICOTS-FRESH	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
05001AA	APRICOTS-FRESH	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
05001AA	APRICOTS-FRESH	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
05001AA	APRICOTS-FRESH	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
05001DA	APRICOTS-DRIED	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
05001DA	APRICOTS-DRIED	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
05001DA	APRICOTS-DRIED	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
05002AA	CERRRIES-FRESH	10 RAW-FRESH OR NFS	3F2884	P 1.000000	1.000000		13.00	0.130000
05002AA	CERRRIES-FRESH	10 RAW-FRESH OR NFS	3F2884	P 1.000000	1.000000		13.00	0.130000
05002AA	CERRRIES-FRESH	21 COOKED-NFS	3F2884	P 1.000000	1.000000		13.00	0.130000
05002AA	CERRRIES-FRESH	21 COOKED-NFS	3F2884	P 1.000000	1.000000		13.00	0.130000
05002AA	CERRRIES-FRESH	31 COOKED-FRESH OR CANNED	3F2884	P 1.000000	1.000000		13.00	0.130000
05002AA	CERRRIES-FRESH	31 COOKED-FRESH OR CANNED	3F2884	P 1.000000	1.000000		13.00	0.130000
05002AA	CERRRIES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	3F2884	P 1.000000	1.000000		13.00	0.130000
05002AA	CERRRIES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	3F2884	P 1.000000	1.000000		13.00	0.130000
05002DA	CERRRIES-DRIED	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 1.000000	1.000000		13.00	0.130000
05002DA	CERRRIES-DRIED	15 RAW-FRESH OR CANNED	3F2884	P 1.000000	1.000000		13.00	0.130000
05002DA	CERRRIES-DRIED	15 RAW-FRESH OR CANNED	3F2884	P 1.000000	1.000000		13.00	0.130000
05002JA	CERRRIES-JUICE	21 COOKED-NFS	3F2884	P 1.000000	1.000000		13.00	0.130000
05002JA	CERRRIES-JUICE	21 COOKED-NFS	3F2884	P 1.000000	1.000000		13.00	0.130000
05003AA	NECTARINES	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		34.00	0.003400
05003AA	NECTARINES	10 RAW-FRESH OR NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05003AA	NECTARINES	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		29.00	0.002900
05003AA	NECTARINES	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		29.00	0.002900
05004AA	PEACHES-FRESH	10 RAW-FRESH OR NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05004AA	PEACHES-FRESH	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		29.00	0.002900
05004AA	PEACHES-FRESH	21 COOKED-NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05004AA	PEACHES-FRESH	21 COOKED-NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05004AA	PEACHES-FRESH	31 COOKED-FRESH OR CANNED	3F2884	P 0.010000	0.010000		29.00	0.002900
05004AA	PEACHES-FRESH	31 COOKED-FRESH OR CANNED	4E04289	P 0.040000	0.040000		100.00	0.040000
05004AA	PEACHES-FRESH	51 COOKED-CANNED	3F2884	P 0.010000	0.010000		29.00	0.002900
05004AA	PEACHES-FRESH	51 COOKED-CANNED	4E04289	P 0.040000	0.040000		100.00	0.040000
05004AA	PEACHES-FRESH	51 COOKED-CANNED	3F2884	P 0.010000	0.010000		29.00	0.002900
05004AA	PEACHES-FRESH	51 COOKED-CANNED	4E04289	P 0.040000	0.040000		100.00	0.040000
05004DA	PEACHES-DRIED	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		29.00	0.002900
05004DA	PEACHES-DRIED	10 RAW-FRESH OR NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05004DA	PEACHES-DRIED	21 COOKED-NFS	3F2884	P 0.010000	0.010000		29.00	0.002900
05004DA	PEACHES-DRIED	21 COOKED-NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05005AA	PLUMS-FRESH	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		13.00	0.001300
05005AA	PLUMS-FRESH	10 RAW-FRESH OR NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05005AA	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	3F2884	P 0.010000	0.010000		13.00	0.001300

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ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 219AA

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg 0.00 ppm LET= 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased plasma Che. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
050054A	PLUMS-FRESH	31 COOKED-FRESH OR CANNED	4E04289	P 0.040000	0.040000		100.00	0.040000
05005DA	PLUMS-PRUNES	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		13.00	0.001300
05005DA	PLUMS-PRUNES	10 RAW-FRESH OR NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05005DA	PLUMS-PRUNES	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.001300
05005DA	PLUMS-PRUNES	21 COOKED-NFS	4E04289	P 0.040000	0.040000		100.00	0.040000
05005DA	PLUMS-PRUNES	31 COOKED-FRESH OR CANNED	3F2884	P 0.010000	0.010000		13.00	0.001300
05005DA	PLUMS-PRUNES	31 COOKED-FRESH OR CANNED	4E04289	P 0.040000	0.040000		100.00	0.040000
05005JA	PRUNE-JUICE	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000C		13.00	0.001300
05005JA	PRUNE-JUICE	10 RAW-FRESH OR NFS	4E04289	P 0.040000	0.040000C		100.00	0.040000
05005JA	PRUNE-JUICE	62 COOKED-FRESH OR FROZEN-BAKED	3F2884	P 0.010000	0.010000C		13.00	0.001300
05005JA	PRUNE-JUICE	62 COOKED-FRESH OR FROZEN-BAKED	4E04289	P 0.040000	0.040000C		100.00	0.040000
06001AA	AVOCADOS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06002AA	BANANAS-UNSPEC	22 COOKED-FRESH-BAKED	3F2884	P 0.010000	0.010000		100.00	0.010000
06002AB	BANANAS-FRESH	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
06002AB	BANANAS-FRESH	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
06002AB	BANANAS-FRESH	31 COOKED-FRESH OR CANNED	3F2884	P 0.010000	0.010000		100.00	0.010000
06002DA	BANANAS-FRESH	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
06002DA	BANANAS-FRESH	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
06003AA	COCONUT-FRESH	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06003AA	COCONUT-FRESH	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000C		100.00	0.005000
06003DA	COCONUT-COPRA	21 COOKED-NFS	6H5505	P 0.100000	0.005000C		100.00	0.005000
06003DA	COCONUT-COPRA	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000C		100.00	0.005000
06003DA	COCONUT-COPRA	62 COOKED-FRESH OR FROZEN-BAKED	6H5505	P 0.100000	0.005000C		100.00	0.005000
06003JA	COCONUT-WATER	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06004AA	DATES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06004AA	DATES	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06004AA	DATES	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
06005AA	FIGS	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
06005AA	FIGS	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
06005AA	FIGS	22 COOKED-FRESH-BAKED	3F2884	P 0.010000	0.010000		100.00	0.010000
06006AA	GUAVA	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06006AA	GUAVA	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06006AA	GUAVA	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06007AA	MANGOES	62 COOKED-FRESH OR FROZEN-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
06007AA	MANGOES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06008AA	LOQUATS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06008AA	LOQUATS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06009AA	OLIVES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06009AA	OLIVES	11 RAW-FRESH-PICKLED, CORNED, OR CURED	6H5505	P 0.100000	0.005000		100.00	0.005000
06009AA	OLIVES	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06010AA	PAPAYAS-UNSPEC	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 2199A

DATE: 08/30/96

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #2199A CAS No. 2921-88-2 A.I. CODE: 059101 CR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg 0.00 ppm LEL= 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased plasma CHE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
06010AB	PAPAYAS-PULP	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06010AB	PAPAYAS-PULP	51 COOKED-CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
06010DA	PAPAYAS-DRIED	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000C		100.00	0.005000
06010JA	PAPAYAS-JUICE	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000C		100.00	0.005000
06011AA	PAMPAWS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06012AA	PERSIMMONS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06013AA	PINEAPPLE-PULP	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06013AA	PINEAPPLE-PULP	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06013AA	PINEAPPLE-PULP	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000C		100.00	0.005000
06013DA	PINEAPPLE-DRIED	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000C		100.00	0.005000
06013JA	PINEAPPLE-JUICE	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000C		100.00	0.005000
06013JA	PINEAPPLE-JUICE	15 RAW-FRESH OR CANNED	6H5505	P 0.100000	0.005000C		100.00	0.005000
06013JA	PINEAPPLE-JUICE	21 COOKED-NFS	6H5505	P 0.100000	0.005000C		100.00	0.005000
06013JA	PINEAPPLE-JUICE	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000C		100.00	0.005000
06014AA	PASSION FRUIT	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06015AA	POMEGRANATES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06015AA	POMEGRANATES	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06016AA	PLANTAINS	21 COOKED-NFS	6H5505	P 0.010000	0.010000		100.00	0.010000
06016AA	PLANTAINS	23 COOKED-FRESH-BOTTLED	6H5505	P 0.010000	0.010000		100.00	0.010000
06016AA	PLANTAINS	25 COOKED-FRESH-FRIED	6H5505	P 0.010000	0.010000		100.00	0.010000
06017AA	LYCHEES	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06017DA	LYCHEE-DRIED	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06018AA	KIWI	10 RAW-FRESH OR NFS	3E2766	P 2.000000	2.000000		100.00	2.000000
06020AA	ACEROLA	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06021AA	GINKGO NUTS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06022AA	MANEY	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06023AA	PITANGA	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06024AA	SOLRSOP	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06025AA	SUGAR APPLES	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06026AA	BREAD FRUIT	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
06027AA	BREAD NUTS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06028AA	SAPOTE	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06029AA	CARAMBOLA	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06030AA	CHERIMOYA	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06031AA	LONGAN FRUIT	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
06033AA	GENIP	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
070015A	COCA BUTTER	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
070015A	CHOCOLATE	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
070015A	CHOCOLATE	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
070015A	CHOCOLATE	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 2199AA

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #2199AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.08 ppm LEL = 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased plasma Che. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI Opp RfD = 0.003000 EPA RfD = 0.003000 UF -->10	No data gaps.	WHO reviewed 1992 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN IAS RUN (ppm)
07002AA	COFFEE	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
07003AA	TEA	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
07006AA	CHICORY	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
08004AA	ANICE	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08006AA	BASIL	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08007AA	CARRAWAY	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08008AA	CASSIA	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08011AA	CINNAMON	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08012AA	CLOVE	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08013AA	CORIANDER	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08014AA	CUMIN	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08015AA	DILL	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08019AA	GINGER	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08020AA	HOPS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
08022AA	HORSERADISH	11 RAW-FRESH-PICKLED, CORNED, OR CURED	6H5505	P 0.100000	0.005000		100.00	0.005000
08023AA	ROSEMARY	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08026AA	MARJORAM	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08026AB	OREGANO	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08028AA	MUSTARD SEED	11 RAW-FRESH-PICKLED, CORNED, OR CURED	6H5505	P 0.100000	0.005000		100.00	0.005000
08028AA	MUSTARD SEED	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
08029AB	MUSTARD SEED	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08029AB	MACE	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08035AA	SAGE	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08036AA	SAVORY	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08038AA	BAY	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08042AA	THYME	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08043AA	TURMERIC	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08047AA	ALLSPICE	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
08048DA	PAPRIKA	00 NOT SPECIFIED (NO CONSUMPTION)	1E2523	P 1.000000	0.140000		100.00	0.140000
08049AA	POPPY	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
10002AA	CANTALOUPE-UMSP	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
10002AB	CANTALOUPE-PULP	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10002AB	CANTALOUPE-PULP	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10003AA	CASABAS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10004AA	GRENSHAUS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
10005AA	HONEYDEW MELONS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10007AA	PERSION MELONS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
10008AA	WATERMELON	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10008AA	WATERMELON	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10010AA	CUCUMBERS	10 RAW-FRESH OR NFS	3F2884	P 0.050000	0.050000		1.00	0.000500

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 219AA

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEL = 0.1000 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Decreased plasma ChE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD = 0.003000 EPA RfD = 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
10010AA	CUCUMBERS	11 RAW-FRESH-PICKLED, CORNED, OR CURED	3F2884	P 0.050000	0.050000		1.00	0.000500
10010AA	CUCUMBERS	21 COOKED-NFS	3F2884	P 0.050000	0.050000		1.00	0.000500
10011AA	PUMPKIN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		3.00	0.001500
10011AA	PUMPKIN	22 COOKED-FRESH-BAKED	3F2884	P 0.050000	0.050000		3.00	0.001500
10011AA	PUMPKIN	62 COOKED-FRESH OR FROZEN-BAKED	3F2884	P 0.050000	0.050000		100.00	0.005000
10013AA	SQUASH-SUMMER	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10013AA	SQUASH-SUMMER	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10014AA	SQUASH-WINTER	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10014AA	SQUASH-WINTER	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10017AA	BITTER MELON	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
10020AA	TOMELGOURD	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
10011AA	EGGPLANT	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10011AA	EGGPLANT	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
10011AA	EGGPLANT	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005000		100.00	0.005000
10033AA	PEPPERS, SWEET	10 RAW-FRESH OR NFS	1E2523	P 1.000000	0.140000		100.00	0.140000
10033AA	PEPPERS, SWEET	21 COOKED-NFS	1E2523	P 1.000000	0.140000		100.00	0.140000
10033AB	CHILI PEPPERS	00 NOT SPECIFIED (NO CONSUMPTION)	1E2523	P 1.000000	0.140000		100.00	0.140000
10033AD	PEPPERS-OTHER	10 RAW-FRESH OR NFS	1E2523	P 1.000000	0.140000		100.00	0.140000
10033AD	PEPPERS-OTHER	21 COOKED-NFS	1E2523	P 1.000000	0.140000		100.00	0.140000
10033AD	PEPPERS-OTHER	51 COOKED-CANNED	1E2523	P 1.000000	0.140000		100.00	0.140000
10044AA	PIMIENTOS	10 RAW-FRESH OR NFS	1E2523	P 1.000000	0.140000		100.00	0.140000
10044AA	PIMIENTOS	21 COOKED-NFS	1E2523	P 1.000000	0.140000		100.00	0.140000
10064AA	PIMIENTOS	31 COOKED-FRESH OR CANNED	1E2523	P 1.000000	0.140000		100.00	0.140000
10055AA	TOMATOES-WHOLE	10 RAW-FRESH OR NFS	4F3008	P 0.500000	0.095000		4.00	0.003800
10055AA	TOMATOES-WHOLE	21 COOKED-NFS	4F3008	P 0.500000	0.095000		4.00	0.003800
10055AA	TOMATOES-WHOLE	31 COOKED-FRESH OR CANNED	4F2999	P 0.500000	0.095000		4.00	0.003800
10055AA	TOMATOES-WHOLE	31 COOKED-FRESH OR CANNED	4F3008	P 0.500000	0.095000		4.00	0.003800
10055AA	TOMATOES-WHOLE	10 RAW-FRESH OR NFS	4F2999	P 0.500000	0.003000C		4.00	0.000120
10055AA	TOMATOES-WHOLE	10 RAW-FRESH OR NFS	4F3008	P 0.500000	0.003000C		4.00	0.000120
10055AA	TOMATOES-WHOLE	10 RAW-FRESH OR NFS	4F2999	P 0.500000	0.003000C		4.00	0.000120
10055AA	TOMATOES-WHOLE	10 RAW-FRESH OR NFS	4F3008	P 0.500000	0.003000C		4.00	0.000120
10055AA	TOMATOES-WHOLE	21 COOKED-NFS	4F2999	P 0.500000	0.003000C		4.00	0.000120
10055AA	TOMATOES-WHOLE	21 COOKED-NFS	4F3008	P 0.500000	0.003000C		4.00	0.000120
10055AA	TOMATOES-WHOLE	21 COOKED-NFS	4F2999	P 0.500000	0.003000C		4.00	0.000120
10055AA	TOMATOES-WHOLE	21 COOKED-NFS	4F3008	P 0.500000	0.003000C		4.00	0.000120
10055RA	TOMATOES-PUREE	10 RAW-FRESH OR NFS	4F3008	P 0.500000	0.010000		4.00	0.000400
10055RA	TOMATOES-PUREE	10 RAW-FRESH OR NFS	4F2999	P 0.500000	0.010000		4.00	0.000400
10055RA	TOMATOES-PUREE	21 COOKED-NFS	4F2999	P 0.500000	0.010000		4.00	0.000400
10055RA	TOMATOES-PUREE	21 COOKED-NFS	4F3008	P 0.500000	0.010000		4.00	0.000400
10055RA	TOMATOES-PUREE	31 COOKED-FRESH OR CANNED	4F2999	P 0.500000	0.010000		4.00	0.000400
10055RA	TOMATOES-PUREE	31 COOKED-FRESH OR CANNED	4F3008	P 0.500000	0.010000		4.00	0.000400

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 219AA

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEL = 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased plasma Che. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF >10 Opp RfD = 0.003000 EPA RfD = 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
11005EA	TOMATOES-PUREE	32 COOKED-FRESH OR CANNED-BAKED	P	0.500000	0.010000		4.00	0.000400
11005FA	TOMATOES-PUREE	32 COOKED-FRESH OR CANNED-BAKED	A	0.500000	0.010000		4.00	0.000400
11005RA	TOMATOES-PUREE	51 COOKED-CANNED	P	0.500000	0.010000		4.00	0.000400
11005RA	TOMATOES-PUREE	51 COOKED-CANNED	A	0.500000	0.010000		4.00	0.000400
11005TA	TOMATOES-PASTE	21 COOKED-NFS	P	0.500000	0.010000		4.00	0.000400
11005TA	TOMATOES-PASTE	21 COOKED-NFS	A	0.500000	0.010000		4.00	0.000400
11005TA	TOMATOES-PASTE	22 COOKED-FRESH-BAKED	P	0.500000	0.010000		4.00	0.000400
11005TA	TOMATOES-PASTE	22 COOKED-FRESH-BAKED	A	0.500000	0.010000		4.00	0.000400
11005TA	TOMATOES-PASTE	31 COOKED-FRESH OR CANNED	P	0.500000	0.010000		4.00	0.000400
11005TA	TOMATOES-PASTE	31 COOKED-FRESH OR CANNED	A	0.500000	0.010000		4.00	0.000400
11005UA	TOMATOES-CATSUP	21 COOKED-NFS	P	0.500000	0.010000		4.00	0.000400
11005UA	TOMATOES-CATSUP	21 COOKED-NFS	A	0.500000	0.010000		4.00	0.000400
11006AA	GROUNDCHERIES	00 NOT SPECIFIED (NO CONSUMPTION)	P	0.100000	0.005000		100.00	0.005000
13001AA	BETTS-TOPS	31 COOKED-FRESH OR CANNED	P	0.100000	0.005000		100.00	0.005000
13001AA	BETTS-TOPS	63 COOKED-FRESH OR FROZEN-BOILED	P	0.100000	0.005000		100.00	0.005000
13002AA	CELERY	10 RAW-FRESH OR NFS	P	0.100000	0.005000		100.00	0.005000
13002AA	CELERY	21 COOKED-NFS	P	0.100000	0.005000		100.00	0.005000
13003AA	CHICORY	10 RAW-FRESH OR NFS	P	0.100000	0.005000		100.00	0.005000
13003AA	CHICORY	21 COOKED-NFS	P	0.100000	0.005000		64.00	0.640000
13005AA	BROCCOLI	31 COOKED-FRESH OR CANNED	P	1.000000	1.000000		64.00	0.640000
13005AA	BROCCOLI	63 COOKED-FRESH OR FROZEN-BOILED	P	1.000000	1.000000		100.00	1.000000
13005AA	BROCCOLI	23 COOKED-NFS	P	1.000000	1.000000		100.00	1.000000
13006AA	BRUSSEL SPROUTS	10 RAW-FRESH OR NFS	P	1.000000	1.000000		56.00	0.560000
13007AA	CABBAGE	11 RAW-FRESH OR NFS	P	1.000000	1.000000		56.00	0.560000
13007AA	CABBAGE	21 COOKED-NFS	P	1.000000	1.000000		100.00	1.000000
13008AA	CAULIFLOWER	10 RAW-FRESH OR NFS	P	1.000000	1.000000		18.00	0.180000
13008AA	CAULIFLOWER	21 COOKED-NFS	P	1.000000	1.000000		18.00	0.180000
13009AA	COLLARDS	51 COOKED-CANNED	P	1.000000	1.000000		56.00	0.560000
13010AA	CABBAGE-CHINESE	63 COOKED-FRESH OR FROZEN-BOILED	P	1.000000	1.000000		56.00	0.560000
13010AA	CABBAGE-CHINESE	10 RAW-FRESH OR NFS	P	1.000000	1.000000		56.00	0.560000
13011AA	KALE	21 COOKED-NFS	P	1.000000	1.000000		100.00	1.000000
13012AA	KOHLRABI	63 COOKED-FRESH OR FROZEN-BOILED	P	1.000000	1.000000		100.00	1.000000
13013AA	LETTUCE-LEAFY	21 COOKED-NFS	A	0.900000	0.235000		100.00	0.235000
13013AA	LETTUCE-LEAFY	10 RAW-FRESH OR NFS	P	0.100000	0.005000		100.00	0.005000
13014AA	DANDELION	63 COOKED-FRESH OR FROZEN-BOILED	P	0.100000	0.005000		100.00	0.005000
13015AA	ENDIVE	10 RAW-FRESH OR NFS	P	0.100000	0.005000		100.00	0.005000
13015AA	ENDIVE	21 COOKED-NFS	P	0.100000	0.005000		100.00	0.005000
13016AA	FENNEL	00 NOT SPECIFIED (NO CONSUMPTION)	P	0.100000	0.005000		100.00	0.005000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEI = 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased plasma CHE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF --> 10 OPP RfD = 0.003000 EPA RfD = 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
13017AA	CRESS	00 NOT SPECIFIED (NO CONSUMPTION)						
13018AA	ARTICHOKE-GLOBE	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13020AA	LETTUCE-UNSPEC	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13020AA	LETTUCE-UNSPEC	10 RAW-FRESH OR NFS	4F3132	A 0.900000	0.235000		100.00	0.235000
13021AA	MUSTARD-GREENS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13021AA	MUSTARD-GREENS	63 COOKED-FRESH OR FROZEN-BOILED	3F2884	P 1.000000	1.000000		100.00	1.000000
13022AA	PARSLEY	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13022AA	PARSLEY	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13022AA	PARSLEY	53 COOKED-CANNED-BOILED	6H5505	P 0.100000	0.005000		100.00	0.005000
13023AA	RHUBARB	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13023AA	RHUBARB	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13023AA	RHUBARB	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
13023AA	RHUBARB	62 COOKED-FRESH OR FROZEN-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
13024AA	SPINACH	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13024AA	SPINACH	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13024AA	SPINACH	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
13025AA	SWISS CHARD	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13025AA	SWISS CHARD	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
13025AA	SWISS CHARD	63 COOKED-FRESH OR FROZEN-BOILED	6H5505	P 0.100000	0.005000		100.00	0.005000
13026AA	TURNIPS-TOPS	10 RAW-FRESH OR NFS	3F2884	P 0.300000	0.300000		100.00	0.300000
13026AA	TURNIPS-TOPS	21 COOKED-NFS	3F2884	P 0.300000	0.300000		100.00	0.300000
13027AA	TURNIPS-TOPS	31 COOKED-FRESH OR CANNED	3F2884	P 0.300000	0.300000		100.00	0.300000
13027AA	WATERCRESS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13027AA	WATERCRESS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13034AA	TARO-GREENS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
13039AA	CRESS, UPLAND	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
13045AA	LETTUCE-HEAD	10 RAW-FRESH OR NFS	4F3132	A 0.900000	0.235000		100.00	0.235000
13045AA	LETTUCE-HEAD	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13045AA	LETTUCE-HEAD	21 COOKED-NFS	4F3132	A 0.900000	0.235000		100.00	0.235000
13045AA	LETTUCE-HEAD	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13047AA	LAMBSQUARTER	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13048AA	CACTUS-PADS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
13049AA	GRAPES-LEAVES	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
13099AA	LEAFY ORIENT VEG	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
14001AA	BETS-ROOTS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14001AA	BETS-ROOTS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14001AA	BETS-ROOTS	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	6H5505	P 0.100000	0.005000		100.00	0.005000
14001AA	BETS-ROOTS	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
14003AA	CARROTS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14003AA	CARROTS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEL = 0.1000 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Decreased plasma ChE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 Opp RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 Rfd/PR reviewed 09/09/93 Rfd/PR reviewed 05/25/95 Rfd/PR reviewed 11/20/95 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)
14003AA	CARROTS	23 COOKED-FRESH-BOILED	6H5505	P 0.100000	0.005000		100.00	0.005000
14003AA	CARROTS	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
14003AA	CARROTS	51 COOKED-CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
14004AA	CELERIAC	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
14005AA	CHIVES	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14006AA	TARO-ROOT	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
14007AA	GARLIC	10 RAW-FRESH OR NFS	0E2387	P 0.500000	0.500000		100.00	0.500000
14007AA	GARLIC	21 COOKED-NFS	0E2387	P 0.500000	0.500000		100.00	0.500000
14009AA	ARTICHOKES-JER	32 COOKED-FRESH OR CANNED-BAKED	0E2387	P 0.500000	0.500000		100.00	0.500000
14010AA	LEEKS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
14011AA	ONIONS-DRY-BULB	31 COOKED-FRESH OR FROZEN	6H5505	P 0.100000	0.005000		100.00	0.005000
14011AA	ONIONS-DRY-BULB	21 COOKED-NFS	0E2387	P 0.500000	0.500000		38.00	0.190000
14011AA	ONIONS-DRY-BULB	22 COOKED-FRESH-BAKED	0E2387	P 0.500000	0.500000		38.00	0.190000
14011AA	ONIONS-DRY-BULB	31 COOKED-FRESH OR CANNED	0E2387	P 0.500000	0.500000		38.00	0.190000
14011AA	ONIONS-DRY-BULB	12 RAW-FRESH-DRIED	0E2387	P 0.500000	0.500000		38.00	0.190000
14013AA	POTATO(WH)-WHOLE	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14013AA	POTATO(WH)-WHOLE	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14013AA	POTATO(WH)-WHOLE	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
14013AB	POTATO(WH)-UNSP	21 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
14013AC	POTATO(WH)-PULP	22 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14013AC	POTATO(WH)-PULP	23 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
14013DA	POTATO(WH)-PEEL	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14013DA	POTATO(WH)-PEEL	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
14013DA	POTATO(WH)-PEEL	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		30.00	0.600000
14014AA	RADISHES-ROOTS	10 RAW-FRESH OR NFS	3F2884	P 2.000000	2.000000		100.00	0.005000
14014AA	RADISHES-ROOTS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P -0.100000	0.005000		100.00	0.005000
14014AB	RADISHES-TOPS	10 RAW-FRESH OR NFS	3F2884	P 0.500000	0.500000		100.00	0.500000
14015AA	RUTABAGAS-ROOTS	21 COOKED-NFS	3F2884	P 0.500000	0.500000		100.00	0.500000
14015AA	RUTABAGAS-ROOTS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
14015AB	RUTABAGAS-TOPS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14016AA	SALSIFY	00 NOT SPECIFIED (NO CONSUMPTION)	0E2387	P 0.500000	0.500000		38.00	0.190000
14018AA	SWEET POTATOES	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
14018AA	SWEET POTATOES	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
14018AA	SWEET POTATOES	51 COOKED-CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
14019AA	TURNIPS-ROOTS	10 RAW-FRESH OR NFS	3F2884	P 1.000000	1.000000		100.00	1.000000
14019AA	TURNIPS-ROOTS	21 COOKED-NFS	3F2884	P 1.000000	1.000000		100.00	1.000000
14021AA	PARSNIPS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #2199A CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg 0.00 ppm LEL= 0.1000 mg/kg 0.00 ppm	Decreased plasma Che. No other systemic effects identified. No evidence of carcinog- enicity in rats, or mice.	ADI UF -->10 OPP RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
14024AA	YAMBEAN, TUBER	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14026AA	CASSAVA	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14026AA	CASSAVA	23 COOKED-FRESH-BOILED	6H5505	P 0.100000	0.005000		100.00	0.005000
14026AB	TAPIOCA	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14026AB	TAPIOCA	31 COOKED-FRESH OR CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
14028AA	YAUTIA, TANNIER	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
14030AA	PARSLEY ROOTS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
14031AA	WATER CHESTNUTS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15001AA	BEANS-DRY-GRT NO	00 NOT SPECIFIED (NO CONSUMPTION).	3F2884	P 0.050000	0.050000		100.00	0.050000
15001AB	BEANS-DRY-KIDNEY	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15001AB	BEANS-DRY-KIDNEY	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
15001AC	BEANS-DRY-NAVY	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15001AD	BEANS-DRY-NAVY	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
15001AE	BEANS-DRY-OTHER	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15001AE	BEANS-DRY-OTHER	25 COOKED-FRESH-FRIED	3F2884	P 0.050000	0.050000		100.00	0.050000
15001AF	BEANS-DRY-PINTO	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15002AA	BEANS-SUCC-LIMA	10 RAW-FRESH OR NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15002AA	BEANS-SUCC-LIMA	21 COOKED-NFS.	3F2884	P 0.050000	0.050000		1.00	0.000500
15003AA	BEANS-SUCC-GREEN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15003AB	BEANS-SUCC-OTHER	10 RAW-FRESH OR NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15003AB	BEANS-SUCC-OTHER	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15003AC	BEANS-SUCC-MAX	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15005AA	CORN, SWEET	10 RAW-FRESH OR NFS	REREG	P 0.050000	0.050000		14.00	0.007000
15005AA	CORN, SWEET	21 COOKED-NFS	REREG	P 0.050000	0.050000		14.00	0.007000
15005AA	CORN, SWEET	31 COOKED-FRESH OR CANNED	REREG	P 0.050000	0.050000		14.00	0.007000
15006AA	PEANUTS-WHOLE	10 RAW-FRESH OR NFS	3F2884	P 0.200000	0.010000		33.00	0.003300
15006AA	PEANUTS-WHOLE	21 COOKED-NFS	3F2884	P 0.200000	0.010000		33.00	0.003300
15007AA	PEANUTS-WHOLE	22 COOKED-FRESH-BAKED	3F2884	P 0.200000	0.010000		33.00	0.003300
15007AA	PEAS DRY-GARDEN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15009AA	PEAS DRY-GARDEN	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		6.00	0.003000
15009AA	PEAS SUCC-GARDEN	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		6.00	0.003000
15011AA	LENTILS-WHOLE	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
15011AB	LENTILS-SPLIT	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15013AA	MUNG BEANS	10 RAW-FRESH OR NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15013AA	MUNG BEANS	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg LEL = 0.1000 mg/kg 0.00 ppm	Decreased plasma CHE - No other systemic effects identified. No evidence of carcinog- enicity in rats or mice.	ADI UF -->10 OPP RfD = 0.003000 EPA RfD = 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
15015AA	OKRA	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15015AA	OKRA	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005000		100.00	0.005000
15018AA	SUNFLOWER-SEEDS	10 RAW-FRESH OR NFS	REREG	P 0.100000	0.046000		1.00	0.000460
15020AA	CAROB	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15020AA	CAROB	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15020AA	CAROB	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
15021AA	ALFALFA SPROUTS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15022AA	BEANS-DRY-BROAD	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
15022AB	BEANS-SUCC-BROAD	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
15023AA	BEANS-DRY-PIGEON	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15026AA	SESAME SEEDS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15026AA	SESAME SEEDS	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
15027AA	BEANS-UNSPEC	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15028AA	PINENUTS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15028AA	PINENUTS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
15029AA	SOYBEAN-SPROUTED	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.300000	0.010000		3.00	0.000300
15030AA	BEANS-DRY-HYACIN	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
15030AB	BEANS-SUCC-HYACI	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
15031AA	BLKEYE PEAS-DRY	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15032AA	BEANS-DRY	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
15032AA	BEANS-DRY	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
16002AA	ASPARAGUS	21 COOKED-NFS	2E2644	P 5.000000	5.000000		96.00	4.800000
16002AA	ASPARAGUS	23 COOKED-FRESH-BOILED	2E2644	P 5.000000	5.000000		96.00	4.800000
16003AA	MUSHROOMS	10 RAW-FRESH OR NFS	3E2886	P 0.100000	0.100000		100.00	0.100000
16003AA	MUSHROOMS	21 COOKED-NFS	3E2886	P 0.100000	0.100000		100.00	0.100000
16003AA	MUSHROOMS	31 COOKED-FRESH OR CANNED	3E2886	P 0.100000	0.100000		100.00	0.100000
16003AA	MUSHROOMS	53 COOKED-CANNED-BOILED	3E2886	P 0.100000	0.100000		100.00	0.100000
16004AA	MUSHROOMS	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
16004AA	MUSHROOMS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
16004AA	MUSHROOMS	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005000		100.00	0.005000
16007AA	ONIONS-GREEN	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
16008AA	BAMBOO SHOOTS	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
24001AA	BARLEY	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
24002EA	CORN, GRAIN-ENDO	10 RAW-FRESH OR NFS	REREG	A 0.100000	0.100000		11.00	0.011000
24002EA	CORN, GRAIN-ENDO	21 COOKED-NFS	REREG	A 0.100000	0.100000		11.00	0.011000
24002EA	CORN, GRAIN-ENDO	22 COOKED-FRESH-BAKED	REREG	A 0.100000	0.100000		11.00	0.011000
24002EA	CORN, GRAIN-ENDO	23 COOKED-FRESH-BOILED	REREG	A 0.100000	0.100000		11.00	0.011000
24002HA	CORN, GRAIN-BRAN	00 NOT SPECIFIED (NO CONSUMPTION)	REREG	A 0.100000	0.100000		11.00	0.011000
24002SA	CORN SUGAR	10 RAW-FRESH OR NFS	REREG	A 0.100000	0.100000		11.00	0.011000
24002SA	CORN SUGAR	21 COOKED-NFS	REREG	A 0.100000	0.100000		11.00	0.011000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #2199A CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEI = 0.1000 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Decreased plasma CHE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
24002SA	CORN SUGAR	22 COOKED-FRESH-BAKED	REREG	A	0.100000	0.100000	11.00	0.011000
24003AA	OATS	21 COOKED-NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
24003AA	OATS	22 COOKED-FRESH-BAKED	6H5505	P	0.100000	0.005000	100.00	0.005000
24003AA	OATS	23 COOKED-FRESH-BOILED	6H5505	P	0.100000	0.005000	100.00	0.005000
24004AA	RICE-ROUGH	21 COOKED-NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
24004AA	RICE-ROUGH	23 COOKED-FRESH-BOILED	6H5505	P	0.100000	0.005000	100.00	0.005000
24004AB	RICE-MILLED	21 COOKED-NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
24004AB	RICE-MILLED	22 COOKED-FRESH-BAKED	6H5505	P	0.100000	0.005000	100.00	0.005000
24004AB	RICE-MILLED	23 COOKED-FRESH-BOILED	6H5505	P	0.100000	0.005000	100.00	0.005000
24005AA	RICE-MILLED	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P	0.100000	0.005000	100.00	0.005000
24005AA	RICE-MILLED	22 COOKED-FRESH-BAKED	6H5505	P	0.100000	0.005000	100.00	0.005000
24005AA	RICE-MILLED	23 COOKED-FRESH-BOILED	6H5505	P	0.100000	0.005000	100.00	0.005000
24005GA	RYE-ROUGH	22 COOKED-FRESH-BAKED	6H5505	P	0.100000	0.005000	100.00	0.005000
24005GA	RYE-ROUGH	21 COOKED-NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
24005MA	RYE-FLOUR	22 COOKED-FRESH-BAKED	6H5505	P	0.100000	0.005000	100.00	0.005000
24005MA	RYE-FLOUR	21 COOKED-NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
24006AA	SORGHUM	00 NOT SPECIFIED (NO CONSUMPTION)	REREG	P	0.500000	0.500000	5.00	0.025000
24007AA	WHEAT-ROUGH	10 RAW-FRESH OR NFS	3F2947	P	0.500000	0.034000	2.00	0.000680
24007AA	WHEAT-ROUGH	21 COOKED-NFS	3F2947	P	0.500000	0.034000	2.00	0.000680
24007AA	WHEAT-ROUGH	22 COOKED-FRESH-BAKED	3F2947	P	0.500000	0.034000	2.00	0.000680
24007AA	WHEAT-ROUGH	23 COOKED-FRESH-BOILED	3F2947	P	0.500000	0.034000	2.00	0.000680
24007GA	WHEAT-GERM	10 RAW-FRESH OR NFS	3F2947	P	1.500000	0.034000	2.00	0.000680
24007GA	WHEAT-GERM	22 COOKED-FRESH-BAKED	3F2947	P	1.500000	0.034000	2.00	0.000680
24007GA	WHEAT-GERM	10 RAW-FRESH OR NFS	3F2947	P	1.500000	0.090000	2.00	0.001800
24007HA	WHEAT-BRAN	21 COOKED-NFS	3F2947	P	1.500000	0.090000	2.00	0.001800
24007HA	WHEAT-BRAN	22 COOKED-FRESH-BAKED	3F2947	P	1.500000	0.090000	2.00	0.001800
24007HA	WHEAT-BRAN	10 RAW-FRESH OR NFS	3F2947	P	0.500000	0.005000	2.00	0.000100
24007MA	WHEAT-FLOUR	21 COOKED-NFS	3F2947	P	0.500000	0.005000	2.00	0.000100
24007MA	WHEAT-FLOUR	22 COOKED-FRESH-BAKED	3F2947	P	0.500000	0.005000	2.00	0.000100
24007MA	WHEAT-FLOUR	25 COOKED-FRESH-FRIED	3F2947	P	0.500000	0.005000	2.00	0.000100
24007MA	WHEAT-FLOUR	10 RAW-FRESH OR NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
24012AA	MILLET	21 COOKED-NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
24012AA	MILLET	10 RAW-FRESH OR NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
25001AA	HONEY	21 COOKED-NFS	6H5505	P	0.100000	0.005000	100.00	0.005000
25001AA	HONEY	22 COOKED-FRESH-BAKED	6H5505	P	0.100000	0.005000	100.00	0.005000
25002SA	BEET SUGAR	10 RAW-FRESH OR NFS	2F2684	P	1.000000	0.010000	22.00	0.002200
25002SA	BEET SUGAR	21 COOKED-NFS	2F2684	P	1.000000	0.010000	22.00	0.002200
25002SA	BEET SUGAR	22 COOKED-FRESH-BAKED	2F2684	P	1.000000	0.010000	22.00	0.002200
25002SA	BEET SUGAR	31 COOKED-FRESH-OR-CANNED	2F2684	P	1.000000	0.010000	22.00	0.002200
25003SA	CANE SUGAR	10 RAW-FRESH OR NFS	3E4192	P	0.010000	0.010000	1.00	0.000100
25003SA	CANE SUGAR	21 COOKED-NFS	3E4192	P	0.010000	0.010000	1.00	0.000100
25003SA	CANE SUGAR	22 COOKED-FRESH-BAKED	3E4192	P	0.010000	0.010000	1.00	0.000100

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg LET= 0.1000 mg/kg 0.00 ppm	Decreased plasma CHE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	EPA reviewed 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
25003SA	CANE SUGAR	31 COOKED-FRESH OR CANNED	3E4192	P 0.010000	0.010000		1.00	0.000100
25003SB	SUGAR-MOLASSES	10 RAW-FRESH OR NFS	3E4192	P 0.010000	0.010000		1.00	0.000100
25003SB	SUGAR-MOLASSES	21 COOKED-NFS	3E4192	P 0.010000	0.010000		1.00	0.000100
25003SB	SUGAR-MOLASSES	22 COOKED-FRESH-BAKED	3E4192	P 0.010000	0.010000		1.00	0.000100
25003SB	SUGAR-MOLASSES	31 COOKED-FRESH OR CANNED	3E4192	P 0.010000	0.010000		1.00	0.000100
25004SA	MAPLE SYRUP	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
25004SA	MAPLE SYRUP	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
26001AA	BUCKWHEAT	22 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
26001AA	BUCKWHEAT	25 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
26011AA	GUAR BEANS	00 NOT SPECIFIED (NO CONSUMPTION)	9F2221	P 0.050000	0.050000		100.00	0.050000
270010A	CASTOR BEANS	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
270020A	CORN, GRAIN-OIL	18 PROCESSED OIL	REREG	A 0.250000	0.150000		14.00	0.021000
270030A	COTTONSEED-OIL	18 PROCESSED OIL	3F2884	P 0.200000	0.045000		8.00	0.003600
270030A	COTTONSEED-OIL	18 PROCESSED OIL	3F2884	P 0.200000	0.200000		8.00	0.016000
27004AA	FLAX SEED	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
270070A	PEANUTS-OIL	18 PROCESSED OIL	3F2884	P 0.400000	0.020000		33.00	0.006600
27008AA	SAFFLOWER-SEED	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
27008AA	SAFFLOWER-OIL	18 PROCESSED OIL	6H5505	P 0.100000	0.005000		100.00	0.005000
270090A	SESAME-OIL	18 PROCESSED OIL	6H5505	P 0.100000	0.005000		100.00	0.005000
270100A	SOYBEANS-OIL	18 PROCESSED OIL	3F2884	P 0.300000	0.001400		3.00	0.000042
270110A	SUNFLOWER-OIL	18 PROCESSED OIL	REREG	P 0.100000	0.100000		1.00	0.001000
270150A	COCONUT-OIL	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
270150A	COCONUT-OIL	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
270150A	COCONUT-OIL	22 COOKED-FRESH-BAKED	6H5505	P 0.100000	0.005000		100.00	0.005000
270150A	COCONUT-OIL	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005000		100.00	0.005000
270150A	COCONUT-OIL	51 COOKED-CANNED	6H5505	P 0.100000	0.005000		100.00	0.005000
270160A	OLIVE OIL	18 PROCESSED OIL	6H5505	P 0.100000	0.005000		100.00	0.005000
27017AA	RAPE SEED	00 NOT SPECIFIED (NO CONSUMPTION)	6H5505	P 0.100000	0.005000		100.00	0.005000
270190A	PALM OIL	18 PROCESSED OIL	6H5505	P 0.100000	0.005000		100.00	0.005000
28023AA	SOYBEANS-UNSPEC	21 COOKED-NFS	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AB	SOYBEANS-DRY	10 RAW-FRESH OR NFS	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AB	SOYBEANS-DRY	21 COOKED-NFS	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AB	SOYBEANS-DRY	23 COOKED-FRESH-BOILED	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AB	SOYBEANS-DRY	25 COOKED-FRESH-FRIED	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AB	SOYBEANS-DRY	31 COOKED-FRESH OR CANNED	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AA	SOY-FL, FULL FAT	21 COOKED-NFS	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AA	SOY-FL, FULL FAT	22 COOKED-FRESH-BAKED	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AA	SOY-FL, FULL FAT	31 COOKED-FRESH OR CANNED	3F2884	P 0.300000	0.010000		3.00	0.000300
28023AB	SOY-FL, LOW FAT	21 COOKED-NFS	3F2884	P 0.300000	0.010000		3.00	0.000300

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #2199A CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg LEL = 0.1000 mg/kg 0.00 ppm 0.00 ppm	Decreased plasma ChE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD = 0.003000 EPA RfD = 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAs RUM (ppm)
28023WC	SOY-FL, DEFAT	10 RAW-FRESH OR NFS	3F2884	P 0.300000	0.010000		3.00	0.000300
28023WC	SOY-FL, DEFAT	21 COOKED-NFS	3F2884	P 0.300000	0.010000		3.00	0.000300
28023WC	SOY-FL, DEFAT	22 COOKED-FRESH-BAKED	3F2884	P 0.300000	0.010000		3.00	0.000300
28023WC	SOY-FL, DEFAT	51 COOKED-CANNED	3F2884	P 0.300000	0.010000		3.00	0.000300
28023WC	SOY-FL, DEFAT	53 COOKED-CANNED-BOILED	3F2884	P 0.300000	0.010000		3.00	0.000300
28024AB	ORNTL NOLEAF VEG	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
28040AA	SEEDS-OTHER	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
28080AA	PEPPERMIN	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.800000	0.800000		57.00	0.456000
28080AA	PEPPERMIN	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.800000	0.800000		57.00	0.456000
28081AA	PEPPERMIN-OIL	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.800000	0.800000		57.00	0.456000
280810A	SPEARMINT	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.800000	0.800000		57.00	0.456000
43057AA	VINEGAR	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
43057AA	VINEGAR	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
43058AA	WINE AND SHERRY	10 RAW-FRESH OR NFS	2E2584	P 1.000000	0.005000		1.00	0.000050
43058AA	WINE AND SHERRY	10 RAW-FRESH OR NFS	3F2872	A 1.000000	0.005000		100.00	0.005000
43058AA	WINE AND SHERRY	21 COOKED-NFS	2E2584	P 1.000000	0.005000		1.00	0.000050
43058AA	WINE AND SHERRY	21 COOKED-NFS	3F2872	A 1.000000	0.005000		100.00	0.005000
43059AA	DIST ALCOHOL	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
43060AA	GELATIN	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
43060AA	GELATIN	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
50000DB	MILK-NON-FAT SOL	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
50000DB	MILK-NON-FAT SOL	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
50000FA	MILK-NON-FAT SOL	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
50000FA	MILK-FAT SOLIDS	10 RAW-FRESH OR NFS	3F2884	P 0.250000	0.250000C		100.00	0.250000
50000FA	MILK-FAT SOLIDS	21 COOKED-NFS	3F2884	P 0.250000	0.250000C		100.00	0.250000
50000FA	MILK-FAT SOLIDS	51 COOKED-NFS	3F2884	P 0.250000	0.250000C		100.00	0.250000
50000SA	MILK SUG (LACT)	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
50000SA	MILK SUG (LACT)	51 COOKED-CANNED	3F2884	P 0.010000	0.010000		100.00	0.010000
53001BA	BEEF-MEAT BYPROD	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53001BA	BEEF-MEAT BYPROD	26 COOKED-FRESH-PICKLED, CORNED OR CURED	3F2884	P 0.050000	0.050000		100.00	0.050000
53001BB	BEEF-OTHER ORGAN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53001BB	BEEF-OTHER ORGAN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53001DA	BEEF-DRIED	51 COOKED-CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
53001FA	BEEF-FAT	10 RAW-FRESH OR NFS	3F2884	P 0.300000	0.300000		100.00	0.300000
53001FA	BEEF-FAT	21 COOKED-NFS	3F2884	P 0.300000	0.300000		100.00	0.300000
53001FA	BEEF-FAT	22 COOKED-FRESH-BAKED	3F2884	P 0.300000	0.300000		100.00	0.300000
53001FA	BEEF-FAT	23 COOKED-FRESH-BOILED	3F2884	P 0.300000	0.300000		100.00	0.300000
53001FA	BEEF-FAT	24 COOKED-FRESH-BROILED	3F2884	P 0.300000	0.300000		100.00	0.300000
53001FA	BEEF-FAT	25 COOKED-FRESH-FRIED	3F2884	P 0.300000	0.300000		100.00	0.300000
53001KA	BEEF-KIDNEY	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #2199A CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm • LEL = 0.1000 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Decreased plasma ChE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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	25 COOKED-FRESH-FRIED	3F2884	P 0.050000	0.050000		100.00	0.050000
53001LA	BEEF-LIVER	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
53001MA	BEEF-LEAN	10 RAW-FRESH OR NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53001MA	BEEF-LEAN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53001MA	BEEF-LEAN	22 COOKED-FRESH-BAKED	3F2884	P 0.050000	0.050000		100.00	0.050000
53001MA	BEEF-LEAN	23 COOKED-FRESH-BOILED	3F2884	P 0.050000	0.050000		100.00	0.050000
53001MA	BEEF-LEAN	24 COOKED-FRESH-BROILED	3F2884	P 0.050000	0.050000		100.00	0.050000
53002BA	GOAT-MEAT BYPROD	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
53002BB	GOAT-OTHER ORGAN	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
53002FA	GOAT-FAT	23 COOKED-FRESH-BOILED	3F2884	P 0.200000	0.200000		100.00	0.200000
53002FA	GOAT-FAT	25 COOKED-FRESH-FRIED	3F2884	P 0.200000	0.200000		100.00	0.200000
53002LA	GOAT-KIDNEY	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
53002LA	GOAT-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
53002MA	GOAT-LEAN	23 COOKED-FRESH-BOILED	3F2884	P 0.050000	0.050000		100.00	0.050000
53002MA	GOAT-LEAN	25 COOKED-FRESH-FRIED	3F2884	P 0.050000	0.050000		100.00	0.050000
53003AA	HORSE	00 NOT SPECIFIED (NO CONSUMPTION)	9F2270	P 0.250000	0.250000		100.00	0.250000
53004AA	RABBIT	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000
53004AA	RABBIT	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005000		100.00	0.005000
53005BA	SHEEP-MEAT BYP	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53005BA	SHEEP-MEAT BYP	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53005FA	SHEEP-FAT	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53005KA	SHEEP-KIDNEY	21 COOKED-NFS	3F2884	P 0.200000	0.200000		100.00	0.200000
53005LA	SHEEP-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.050000	0.050000		100.00	0.050000
53005MA	SHEEP-LEAN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53005MA	SHEEP-LEAN	31 COOKED-FRESH OR CANNED	3F2884	P 0.050000	0.050000		100.00	0.050000
53006BA	PORK-MEAT BYP	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53006BA	PORK-MEAT BYP	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53006BB	PORK-OTH ORGANS	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	3F2884	P 0.050000	0.050000		100.00	0.050000
53006BB	PORK-OTH ORGANS	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	3F2884	P 0.050000	0.050000		100.00	0.050000
53006FA	PORK-FAT	10 RAW-FRESH OR NFS	3F2884	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	21 COOKED-NFS	3F2884	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	23 COOKED-FRESH-BOILED	3F2884	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	25 COOKED-FRESH-FRIED	3F2884	P 0.200000	0.200000		100.00	0.200000
53006FA	PORK-FAT	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	3F2884	P 0.200000	0.200000		100.00	0.200000
53006KA	PORK-KIDNEY	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53006LA	PORK-LIVER	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53006LA	PORK-LIVER	25 COOKED-FRESH-FRIED	3F2884	P 0.050000	0.050000		100.00	0.050000
53006MA	PORK-LEAN	21 COOKED-NFS	3F2884	P 0.050000	0.050000		100.00	0.050000
53006MA	PORK-LEAN	25 COOKED-FRESH-FRIED	3F2884	P 0.050000	0.050000		100.00	0.050000
53006MA	PORK-LEAN	26 COOKED-FRESH-PICKLED, CORNED, OR CURED	3F2884	P 0.050000	0.050000		100.00	0.050000
53010AA	FISH-UNSPEC	21 COOKED-NFS	6H5505	P 0.100000	0.005000		100.00	0.005000

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg 0.00 ppm LEL= 0.1000 mg/kg 0.00 ppm ONCO: E (Rfd/PR Committee)	Decreased plasma ChE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP Rfd= 0.003000 EPA Rfd= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 Rfd/PR reviewed 09/09/93 Rfd/PR reviewed 05/25/95 Rfd/PR reviewed 11/20/95 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)
53013AA	FISH, SHELL	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005500		100.00	0.005500
53013AA	FISH, SHELL	21 COOKED-NFS	6H5505	P 0.100000	0.005500		100.00	0.005500
53013AA	FISH, SHELL	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005500		100.00	0.005500
53014AA	MEAT, GAME	21 COOKED-NFS	6H5505	P 0.100000	0.005500		100.00	0.005500
53014AA	MEAT, GAME	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005500		100.00	0.005500
53015AA	FISH-ROE, CAVIAR	21 COOKED-NFS	6H5505	P 0.100000	0.005500		100.00	0.005500
53015AA	FISH-ROE, CAVIAR	51 COOKED-CANNED	6H5505	P 0.100000	0.005500		100.00	0.005500
53016AA	FISH, FIN-FRESH	21 COOKED-NFS	6H5505	P 0.100000	0.005500		100.00	0.005500
53016AA	FISH, FIN-FRESH	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005500		100.00	0.005500
53017AA	FISH, FIN-SALT	10 RAW-FRESH OR NFS	6H5505	P 0.100000	0.005500		100.00	0.005500
53017AA	FISH, FIN-SALT	21 COOKED-NFS	6H5505	P 0.100000	0.005500		100.00	0.005500
53017AA	FISH, FIN-SALT	25 COOKED-FRESH-FRIED	6H5505	P 0.100000	0.005500		100.00	0.005500
53017DA	FISH, FIN-SLT-DRY	12 RAW-FRESH-DRIED	6H5505	P 0.100000	0.005500C		100.00	0.005500
53017DA	FISH, FIN-SLT-DRY	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008BA	TURKEY-BYPRODUCT	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008BA	TURKEY-BYPRODUCT	26 COOKED-FRESH-PICKLED, CORNED OR CURED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008BA	TURKEY ORGAN	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008BA	TURKEY ORGAN	25 COOKED-FRESH-FRIED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008BA	TURKEY W/O SKIN	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008BA	TURKEY W/O SKIN	31 COOKED-FRESH OR CANNED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008BA	TURKEY W/O SKIN	62 COOKED-FRESH OR FROZEN-BAKED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008MB	TURKEY+SKIN	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008MB	TURKEY+SKIN	25 COOKED-FRESH-FRIED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55008MC	TURKEY-UNSPEC	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55013BA	POULTRY, OTH-BYP	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55013LA	POULTRY, ORGAN	25 COOKED-FRESH-FRIED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55013MA	POULTRY, OTHER	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55014AA	EGGS-WHOLE	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AA	EGGS-WHOLE	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AA	EGGS-WHOLE	22 COOKED-FRESH-BAKED	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AA	EGGS-WHOLE	23 COOKED-FRESH-BOILED	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AA	EGGS-WHOLE	25 COOKED-FRESH-FRIED	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AA	EGGS-WHOLE	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AB	EGGS-WHITE ONLY	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AB	EGGS-WHITE ONLY	22 COOKED-FRESH-BAKED	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AB	EGGS-WHITE ONLY	62 COOKED-FRESH OR FROZEN-BAKED	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AB	EGGS-WHITE ONLY	81 COOKED-FROZEN	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AC	EGGS-YOLK ONLY	10 RAW-FRESH OR NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AC	EGGS-YOLK ONLY	21 COOKED-NFS	3F2884	P 0.010000	0.010000		100.00	0.010000
55014AC	EGGS-YOLK ONLY	25 COOKED-FRESH-FRIED	3F2884	P 0.010000	0.010000		100.00	0.010000

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 219AA

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CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CFR No. 180.342 185.1000	Human 20 day feeding NOEL= 0.0300 mg/kg 0.00 ppm LEL= 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased plasma ChE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 Opp RfD= 0.003000 EPA RfD= 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 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)
55014AC	EGGS-YOLK ONLY	31 COOKED-FRESH OR CANNED	3F2884	P 0.010000	0.010000	FEEDING STUDY	100.00	0.010000
55015BA	CHICKEN-BYPROD	00 NOT SPECIFIED (NO CONSUMPTION)	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015LA	CHICKEN-ORGAN	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015LA	CHICKEN-ORGAN	25 COOKED-FRESH-FRIED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015LA	CHICKEN-ORGAN	26 COOKED-FRESH-PICKLED, CORNED OR CURED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015MA	CHICKEN-W/O SKIN	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015MA	CHICKEN-W/O SKIN	22 COOKED-FRESH-BAKED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015MA	CHICKEN-W/O SKIN	25 COOKED-FRESH-FRIED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015MA	CHICKEN-W/O SKIN	31 COOKED-FRESH-OR CANNED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015MA	CHICKEN-W/O SKIN	53 COOKED-CANNED-BOILED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015MB	CHICKEN+SKIN	21 COOKED-NFS	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000
55015MB	CHICKEN+SKIN	25 COOKED-FRESH-FRIED	3F2884	P 0.100000	0.010000	FEEDING STUDY	100.00	0.010000

Attachment 2: Residue Information for Acute Exposure Analysis

01010AA10	1.0000	CRANBERRIES	03001AA10	0.2000	ALMONDS
01010AA21	1.0000	CRANBERRIES	03001AA21	0.2000	ALMONDS
01010AA31	1.0000	CRANBERRIES	03001AA22	0.2000	ALMONDS
01010JA15	1.0000	CCRANBERRY - JUICE	03002AA10	0.2000	BRAZIL NUTS
01010JA31	1.0000	CCRANBERRY - JUICE	03002AA21	0.2000	BRAZIL NUTS
01014AA10	1.0000	GRAPES - FRESH	03003AA10	0.2000	CASHEWS
01014AA21	1.0000	GRAPES - FRESH	03003AA21	0.2000	CASHEWS
01014AA31	1.0000	GRAPES - FRESH	03004AA21	0.2000	CHESTNUTS
01014DA10	0.1200	CGRAPES - RAISINS	03005AA10	0.2000	FILBERTS
01014DA21	0.1200	CGRAPES - RAISINS	03005AA21	0.2000	FILBERTS
01014DA22	0.1200	CGRAPES - RAISINS	03005AA22	0.2000	FILBERTS
01014JA10	0.0100	CGRAPES - JUICE	03006AA10	0.2000	HICKORY NUTS
01014JA15	0.0100	CGRAPES - JUICE	03007AA10	0.2000	MACADAMIA NUTS
01014JA21	0.0100	CGRAPES - JUICE	03008AA10	0.2000	PECANS
01016AA10	0.2000	STRAWBERRIES	03008AA21	0.2000	PECANS
01016AA21	0.2000	STRAWBERRIES	03008AA22	0.2000	PECANS
01016AA70	0.2000	STRAWBERRIES	03008AA23	0.2000	PECANS
02001AA22	1.0000	CITRUS CITRON	03009AA21	0.2000	PECANS
02002AA00	1.0000	GRAPEFRUIT - UNSP	03009AA10	0.2000	WALNUTS
02002AB10	1.0000	GRAPEFRUIT - PULP	03009AA22	0.2000	WALNUTS
02002AB21	1.0000	GRAPEFRUIT - PULP	03010AA00	0.2000	BUTTER NUTS
02002JA15	0.0150	CGRAPEFRUIT - JUICE	03013AA00	0.2000	BEECHNUTS
02002JA31	0.0150	CGRAPEFRUIT - JUICE	04001AA10	1.5000	APPLES - FRESH
02003AA10	1.0000	KUMQUATS	04001AA21	0.0470	APPLES - FRESH
02004AA10	1.0000	LEMONS - UNSPEC	04001AA31	0.0470	APPLES - FRESH
02004AA22	1.0000	LEMONS - UNSPEC	04001AA62	0.0470	APPLES - FRESH
02004AB10	1.0000	LEMONS - PULP	04001DA10	1.5000	APPLES - DRIED
02004AB31	1.0000	LEMONS - PULP	04001DA22	0.0470	APPLES - DRIED
02004HA10	1.0000	LEMONS - PEEL	04001DA62	0.0470	APPLES - DRIED
02004HA21	1.0000	LEMONS - PEEL	04001JA15	0.0620	CAPPLES - JUICE
02004JA10	0.0150	CLEMONS - JUICE	04001JA31	0.0620	CAPPLES - JUICE
02004JA15	0.0150	CLEMONS - JUICE	04003AA10	0.0500	PEARS - FRESH
02004JA21	0.0150	CLEMONS - JUICE	04003AA51	0.0500	PEARS - FRESH
02004JA31	0.0150	CLEMONS - JUICE	04003AA62	0.0500	PEARS - FRESH
02005AA00	1.0000	LIMES - UNSPEC	04003DA10	0.0500	PEARS - DRIED
02005AB10	1.0000	LIMES - PULP	04003DA21	0.0500	PEARS - DRIED
02005AA21	1.0000	LIMES - PEEL	05002AA10	1.0000	CHEERRIES - FRESH
02005JA10	0.0150	CLIMES - JUICE	05002AA21	1.0000	CHEERRIES - FRESH
02005JA15	0.0150	CLIMES - JUICE	05002AA31	1.0000	CHEERRIES - FRESH
02005JA31	0.0150	CLIMES - JUICE	05002AA62	1.0000	CHEERRIES - FRESH
02006AA00	1.0000	ORANGES - UNSPEC	05002DA09	1.0000	CHEERRIES - DRIED
02006AB10	1.0000	ORANGES - PULP	05002JA15	1.0000	CHEERRIES - JUICE
02006AB21	1.0000	ORANGES - PULP	05002JA21	1.0000	CHEERRIES - JUICE
02006HA21	1.0000	ORANGES - PEEL	05003AA10	0.0500	NECTARINES
02006HA22	1.0000	ORANGES - PEEL	05004AA10	0.0500	PEACHES - FRESH
02006HA31	1.0000	ORANGES - PEEL	05004AA21	0.0500	PEACHES - FRESH
02006JA15	0.0150	CORANGES - JUICE	05004AA31	0.0500	PEACHES - FRESH
02007AA10	1.0000	TANGELOS	05004AA51	0.0500	PEACHES - FRESH
02008AA10	1.0000	TANGERINES	05004DA10	0.0500	PEACHES - DRIED
02008JA15	1.0000	CTANGERINE - JUICE			

05004DA21 0.0500 PEACHES-DRIED
 05005AA10 0.0500 PLUMS-FRESH
 05005AA31 0.0500 PLUMS-FRESH
 05005DA10 0.0500 PLUMS-PRUNES
 05005DA21 0.0500 PLUMS-PRUNES
 05005DA31 0.0500 PLUMS-PRUNES
 05005JA10 0.0500CPRUNE-JUICE
 05005JA62 0.0500CPRUNE-JUICE
 06002AA22 0.0100 BANANAS-UNSPEC
 06002AB10 0.0100 BANANAS-FRESH
 06002AB21 0.0100 BANANAS-FRESH
 06002AB31 0.0100 BANANAS-FRESH
 06002DA10 0.0100 BANANAS-DRIED
 06002DA21 0.0100 BANANAS-DRIED
 06005AA10 0.0100 FIGS
 06005AA21 0.0100 FIGS
 06005AA22 0.0100 FIGS
 06016AA21 0.0100 PLANTAINS
 06016AA23 0.0100 PLANTAINS
 06016AA25 0.0100 PLANTAINS
 06018AA10 2.0000 KIVI
 08004BDA00 1.0000 PAPRIKA
 10010AA10 0.0500 CUCUMBERS
 10010AA11 0.0500 CUCUMBERS
 10010AA21 0.0500 CUCUMBERS
 10011AA21 0.0500 PUMPKIN
 10011AA22 0.0500 PUMPKIN
 10011AA62 0.0500 PUMPKIN
 11003AA10 1.0000 PEPPERS-SWEET
 11003AA21 1.0000 PEPPERS-SWEET
 11003AB00 1.0000 CHILL PEPPERS
 11003AD10 1.0000 PEPPERS-OTHER
 11003AD21 1.0000 PEPPERS-OTHER
 11003AD51 1.0000 PEPPERS-OTHER
 11004AA10 1.0000 PIMIENTOS
 11004AA21 1.0000 PIMIENTOS
 11004AA31 1.0000 PIMIENTOS
 11005AA10 1.0000 TOMATOES-WHOLE
 11005AA21 1.0000 TOMATOES-WHOLE
 11005AA31 1.0000 TOMATOES-WHOLE
 11005JA10 0.0060COTOMATOES-JUICE
 11005JA21 0.0060COTOMATOES-JUICE
 11005RA10 0.0200 TOMATOES-PUREE
 11005RA21 0.0200 TOMATOES-PUREE
 11005RA31 0.0200 TOMATOES-PUREE
 11005RA32 0.0200 TOMATOES-PUREE
 11005RA51 0.0200 TOMATOES-PUREE
 11005TA21 0.0200 TOMATOES-PASTE
 11005TA22 0.0200 TOMATOES-PASTE
 11005TA31 0.0200 TOMATOES-PASTE
 11005UA21 0.0200 TOMATOES-CATSUP

13005AA21 1.0000 BROCCOLI
 13005AA31 1.0000 BROCCOLI
 13005AA63 1.0000 BROCCOLI
 13006AA21 1.0000 BRUSSEL SPROUTS
 13006AA23 1.0000 BRUSSEL SPROUTS
 13007AA10 1.0000 CABBAGE
 13007AA11 1.0000 CABBAGE
 13007AA21 1.0000 CABBAGE
 13008AA10 1.0000 CAULIFLOWER
 13008AA21 1.0000 CAULIFLOWER
 13009AA51 1.0000 COLLARDS
 13009AA63 1.0000 COLLARDS
 13010AA10 1.0000 CABBAGE-CHINESE
 13010AA21 1.0000 CABBAGE-CHINESE
 13011AA63 1.0000 KALE
 13012AA21 1.0000 KOHLRABI
 13013AA10 1.0000 LETTUCE-LEAFY
 13020AA10 1.0000 LETTUCE-UNSPEC
 13021AA21 1.0000 MUSTARD GREENS
 13021AA63 1.0000 MUSTARD GREENS
 13026AA10 0.3000 TURNIPS-TOPS
 13026AA21 0.3000 TURNIPS-TOPS
 13026AA31 0.3000 TURNIPS-TOPS
 13045AA10 1.0000 LETTUCE-HEAD
 13045AA21 1.0000 LETTUCE-HEAD
 14007AA10 0.5000 GARLIC
 14007AA21 0.5000 GARLIC
 14007AA32 0.5000 GARLIC
 14011AA10 0.5000 ONIONS-DRY-BULB
 14011AA21 0.5000 ONIONS-DRY-BULB
 14011AA22 0.5000 ONIONS-DRY-BULB
 14011AA31 0.5000 ONIONS-DRY-BULB
 14011DA12 0.5000 ONIONS-DRIED
 14014AA10 2.0000 RADISHES-ROOTS
 14015AA10 0.5000 RUTABAGAS-ROOTS
 14015AA21 0.5000 RUTABAGAS-ROOTS
 14017AA00 0.5000 SHALLOTS
 14018AA21 0.0500 SWEETPOTATOES
 14018AA31 0.0500 SWEETPOTATOES
 14018AA51 0.0500 SWEETPOTATOES
 14019AA10 1.0000 TURNIPS-ROOTS
 14019AA21 1.0000 TURNIPS-ROOTS
 15001AA00 0.0500 BEANS-DRY-GRT NO
 15001AB21 0.0500 BEANS-DRY-KIDNEY
 15001AB31 0.0500 BEANS-DRY-KIDNEY
 15001AC21 0.0500 BEANS-DRY-LIMA
 15001AD21 0.0500 BEANS-DRY-NAVY
 15001AD31 0.0500 BEANS-DRY-NAVY
 15001AE21 0.0500 BEANS-DRY-OTHER
 15001AE25 0.0500 BEANS-DRY-OTHER
 15001AE31 0.0500 BEANS-DRY-OTHER

15001AF21	0.0500	BEANS-DRY-PINTO	24007GA10	0.0900	WHEAT-GERM
15002AA10	0.0500	BEANS-SUCC-LIMA	24007GA22	0.0900	WHEAT-GERM
15002AA21	0.0500	BEANS-SUCC-LIMA	24007HA10	0.0900	WHEAT-BRAN
15003AA21	0.0500	BEANS-SUCC-GREEN	24007HA21	0.0900	WHEAT-BRAN
15003AB10	0.0500	BEANS-SUCC-OTH	24007HA22	0.0900	WHEAT-BRAN
15003AB21	0.0500	BEANS-SUCC-OTH	24007MA10	0.0050	WHEAT-FLOUR
15003AC21	0.0500	BEANS-SUCC-MAX	24007MA22	0.0050	WHEAT-FLOUR
15005AA10	0.0500	CORN,SHEET	24007MA25	0.0050	WHEAT-FLOUR
15005AA21	0.0500	CORN,SHEET	25002SA10	0.0100	BEET SUGAR
15005AA31	0.0500	CORN,SHEET	25002SA21	0.0100	BEET SUGAR
15006AA10	0.0100	PEANUTS-WHOLE	25002SA22	0.0100	BEET SUGAR
15006AA21	0.0100	PEANUTS-WHOLE	25002SA31	0.0100	BEET SUGAR
15006AA22	0.0100	PEANUTS-WHOLE	25003SA10	0.0100	CANE SUGAR
15007AA21	0.0500	PEAS DRY-GARDEN	25003SA21	0.0100	CANE SUGAR
15007AA31	0.0500	PEAS DRY-GARDEN	25003SA22	0.0100	CANE SUGAR
15009AA21	0.0500	PEAS SUCC-GARDEN	25003SA31	0.0100	CANE SUGAR
15009AA31	0.0500	PEAS SUCC-GARDEN	25003SB10	0.0100	SUGAR-MOLASSES
15011AA31	0.0500	LENTILES-WHOLE	25003SB21	0.0100	SUGAR-MOLASSES
15011AB21	0.0500	LENTILES-SPLIT	25003SB22	0.0100	SUGAR-MOLASSES
15013AA10	0.0500	MUNG BEANS	25003SB31	0.0100	SUGAR-MOLASSES
15013AA21	0.0500	MUNG BEANS	26011AA00	0.0500	GUAR BEANS
15018AA10	0.0460	SUNFLOWER-SEEDS	27002DA18	0.1500	CORN, GRAIN-OIL
15022AB00	0.0500	BEANS-DRY-BROAD	27003DA18	0.0450	COTTONSEED-OIL
15022AB00	0.0500	BEANS-SUCC-BROAD	27003MA18	0.2000	COTTONSEED-MEAL
15023AA21	0.0500	BEANS-DRY-PIGION	27007DA18	0.0200	PEANUTS-OIL
15027AA21	0.0500	BEANS-UNSPEC	27010DA18	0.0014	CSOYBEANS-OIL
15029AA00	0.0100	SOYBEAN-SPROUTED	270110A18	0.1000	SUNFLOWER-OIL
15030AA00	0.0500	BEANS-DRY-HYAC	28023AA21	0.0100	SOYBEANS-UNSPEC
15030AB00	0.0500	BEANS-SUCC-HYAC	28023AB10	0.0100	SOYBEANS-DRY
15031AA21	0.0500	BLKEYE PEAS-DRY	28023AB21	0.0100	SOYBEANS-DRY
15032AA21	0.0500	BEANS-DRY	28023AB23	0.0100	SOYBEANS-DRY
15032AA31	0.0500	BEANS-DRY	28023AB25	0.0100	SOYBEANS-DRY
16002AA21	5.0000	ASPARAGUS	28023AB31	0.0100	SOYBEANS-DRY
16002AA23	5.0000	ASPARAGUS	28023MA21	0.0100	SOY-FL, FULL FAT
16003AA10	0.1000	MUSHROOMS	28023MA22	0.0100	SOY-FL, FULL FAT
16003AA21	0.1000	MUSHROOMS	28023MA31	0.0100	SOY-FL, FULL FAT
16003AA31	0.1000	MUSHROOMS	28023MB21	0.0100	SOY-FL, LOW FAT
16003AA53	0.1000	MUSHROOMS	28023MC10	0.0100	SOY-FL, DEFAT
24002EA10	0.1000	CORN, GRAIN-ENDO	28023MC21	0.0100	SOY-FL, DEFAT
24002EA21	0.1000	CORN, GRAIN-ENDO	28023MC22	0.0100	SOY-FL, DEFAT
24002EA22	0.1000	CORN, GRAIN-ENDO	28023MC51	0.0100	SOY-FL, DEFAT
24002EA23	0.1000	CORN, GRAIN-ENDO	28023MC53	0.0100	SOY-FL, DEFAT
24002HA00	0.1000	CORN, GRAIN-BRAN	28080AA00	0.8000	PEPPERMINT
24002SA10	0.1000	CORN SUGAR	28080OA00	8.0000	CPEPPERMINT-OIL
24002SA21	0.1000	CORN SUGAR	28081AA00	0.8000	SPEARMINT
24002SA22	0.1000	CORN SUGAR	28081OA00	8.0000	CSPPEARMINT-OIL
24006AA00	0.5000	SORGHUM	43058AA10	0.0100	WINE AND SHERRY
24007AA10	0.0340	WHEAT-ROUGH	43058AA21	0.0100	WINE AND SHERRY
24007AA21	0.0340	WHEAT-ROUGH	50000DB10	0.0100	MILK-NON-FAT SOL
24007AA22	0.0340	WHEAT-ROUGH	50000DB21	0.0100	MILK-NON-FAT SOL

Attachment 3: Chronic Exposure and Risk Estimates
 TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 08/30/96
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CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Chlorpyrifos Caswell #219AA CAS No. 2921-88-2 A.I. CODE: 059101 CR No. 180.342 185.1000	Human 20 day feeding NOEL = 0.0300 mg/kg 0.00 ppm LEL = 0.1000 mg/kg 0.00 ppm ONCO: E (RfD/PR Committee)	Decreased plasma CHE. No other systemic effects identified. No evidence of carcinogenicity in rats or mice.	ADI UF -->10 OPP RfD = 0.003000 EPA RfD = 0.003000	No data gaps.	WHO reviewed 1982 EPA verified 03/11/86 RfD/PR reviewed 09/09/93 RfD/PR reviewed 05/25/95 RfD/PR reviewed 11/20/95 On IRIS.

POPULATION SUBGROUP	TOTAL TMRC (MG/KG BODY WEIGHT/DAV)	CURRENT TMRC*	NEW TMRC**	NEW TMRC AS PERCENT OF RFD	DIFFERENCE AS PERCENT OF RFD	EFFECT OF ANTICIPATED RESIDUES ARC	%RFD
U.S. POPULATION - 48 STATES	0.005768	0.006840	227.983567	35.708367	0.000946	31.52250	
U.S. POPULATION - SPRING SEASON	0.005524	0.006555	218.509500	34.392833	0.000945	31.49067	
U.S. POPULATION - SUMMER SEASON	0.005376	0.006490	216.340167	37.129333	0.000869	28.98287	
U.S. POPULATION - FALL SEASON	0.006003	0.007069	235.638133	35.537400	0.000988	32.92047	
U.S. POPULATION - WINTER SEASON	0.006067	0.007140	238.011900	35.784467	0.000961	32.03493	
NORTHEAST REGION	0.006430	0.007558	251.917733	37.592167	0.000958	31.91980	
NORTH CENTRAL REGION	0.005707	0.006799	226.633367	36.413733	0.000922	30.74590	
SOUTHERN REGION	0.005014	0.005922	197.393400	30.255933	0.000877	29.22703	
WESTERN REGION	0.006132	0.007380	245.988300	41.602833	0.001056	35.20887	
HISPANICS	0.006385	0.007622	254.053733	41.220833	0.000970	32.34880	
NON-HISPANIC WHITES	0.005763	0.006878	229.277533	37.194067	0.000938	31.27600	
NON-HISPANIC BLACKS	0.005187	0.005909	196.963333	24.051133	0.000914	30.46177	
NON-HISPANIC OTHERS	0.006822	0.007751	258.355233	30.970767	0.001198	39.93860	
NURSING INFANTS (< 1 YEAR OLD)	0.009979	0.010158	338.611600	5.986767	0.000682	22.74380	
NON-NURSING INFANTS (< 1 YEAR OLD)	0.016846	0.017552	585.079133	23.558500	0.001746	58.20967	
FEMALES (13+ YEARS, PREGNANT)	0.004385	0.005353	178.438000	32.281167	0.000694	23.14113	
FEMALES 13+ YEARS, NURSING	0.004984	0.006103	203.441967	37.296567	0.000863	28.75650	
CHILDREN (1-6 YEARS OLD)	0.013922	0.015863	528.781967	64.722733	0.001870	62.34180	
CHILDREN (7-12 YEARS OLD)	0.008428	0.009977	332.577167	51.650233	0.001285	42.83337	
MALES (13-19 YEARS OLD)	0.005227	0.006284	209.462367	35.244567	0.000866	28.85113	
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)	0.006648	0.005590	186.349900	31.403300	0.000767	25.56203	
MALES (20 YEARS AND OLDER)	0.003987	0.004858	161.924300	29.033600	0.000764	25.45777	
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)	0.004117	0.005019	167.312267	30.074467	0.000763	25.42177	

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

Attachment 4: Acute Exposure Distributions and MOE Calculations

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*NAME: CHLORPYRIFOS
*CASSELL NO: 2199A   CFR NO: CFR180.342   STUDY   RDV   NOEL   SF   STUDY TYPE   SPECIES   EFF. LEV.   CORE GRADE   DDC. NO.*
*CAS NO: 02921-98-2  SHAUGHNESSY NO: 059101 B   A   00000.0030 000002.000 000010 Subchronic Human   Enzymatic   Supplementl   0000003822*
*STATUS CODES: R.S. RPAR   C   Chronic   Dog   Enzymatic   Minimum   0000004712*
*RDV INFO: The LD value used in this analysis is 0.01   MG/KG of BODY WEIGHT/DAY   Rat   Enzymatic   Supplementl   0000003822*
*FILE INFO: No Tolerance Data Are Used--Without User Modifications.
*****
U.S. POP.--48 STATES
*****
ESTIMATED % OF POTENTIAL   MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
*****

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ESTIMATES BASED ON

TOLERANCES: 0.00

ANTICIPATED RESIDUES: 99.83

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
100	55	27	14	8	5	3	2	1	1	1	0	0	0	0	0	0

TOLERANCES: 0.00

ANTICIPATED RESIDUES: 0.003334

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
100	55	27	14	8	5	3	2	1	1	1	0	0	0	0	0	0

U.S. Population

Exposure = RDV x X
 = 0.01 x 3
 = 0.03 mg/kg/day

MOE = NOEL ÷ Exposure
 = 0.1 mg/kg/day ÷ 0.03 mg/kg/day
 MOE = 3.3

INFANTS (<1 YEAR)

ESTIMATED % OF POTENTIAL

MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY

ESTIMATES BASED ON

TOLERANCES: 0.00

ANTICIPATED RESIDUES: 94.14

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
100	63	45	33	22	13	8	4	3	2	2	0	0	0	0	0	0

TOLERANCES: 0.00

ANTICIPATED RESIDUES: 0.004924

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
100	63	45	33	22	13	8	4	3	2	2	0	0	0	0	0	0

Infants (<1 year)

Exposure = RDV x X
 = 0.01 x 3
 = 0.03 mg/kg/day

MOE = NOEL ÷ Exposure
 = 0.1 mg/kg/day ÷ 0.03 mg/kg/day
 MOE = 3.3

CHILDREN(1-6 YRS)

ESTIMATES BASED ON		ESTIMATED % OF POTENTIAL																MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY															
TOLERANCES:		PERSON DAYS THAT ARE USER-DAYS		MG/KG BODY WEIGHT/DAY		AS PERCENT OF RDV		ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=		AS PERCENT OF RDV		ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=		AS PERCENT OF RDV		ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=		AS PERCENT OF RDV															
0	0	89	63	42	29	22	16	12	9	7	5	3	2	3	4	5	10	15	20														
0	0	99.98	99.87	0.00	0.00	0.000000	0.000000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00														

Children (1 through 6 years)

Exposure = RDV x X
 = 0.01 x 4
 = 0.04 mg/kg/day
 MOE = NOEL + Exposure
 = 0.1 mg/kg/day + 0.04 mg/kg/day
 MOE = 2.5

FEMALES(13+ YRS)

ESTIMATES BASED ON		ESTIMATED % OF POTENTIAL																MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY															
TOLERANCES:		PERSON DAYS THAT ARE USER-DAYS		MG/KG BODY WEIGHT/DAY		AS PERCENT OF RDV		ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=		AS PERCENT OF RDV		ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=		AS PERCENT OF RDV		ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=		AS PERCENT OF RDV															
0	0	46	20	9	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0														
0	0	99.87	99.87	0.00	0.00	0.000000	0.000000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00														

Females (13+ years)

Exposure = RDV x X
 = 0.01 x 1.4
 = 0.014 mg/kg/day
 MOE = NOEL + Exposure
 = 0.1 mg/kg/day + 0.014 mg/kg/day
 MOE = 7.14

MALES (13+ YRS)

ESTIMATED % OF POTENTIAL	MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
ESTIMATES BASED ON TOLERANCES:	PERSON DAYS THAT ARE USER-DAYS
ANTICIPATED RESIDUES:	MG/KG BODY WEIGHT/DAY
	AS PERCENT OF RDV
	ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X =
	0 1 2 3 4 5 10 15 20
TOLERANCES:	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ANTICIPATED RESIDUES:	100 48 19 8 3 2 1 0 0 0 0 0 0 0 0

Males (13+ years)

Exposure = RDV x X
 = 0.01 x 1.4
 = 0.014 mg/kg/day
 MOE = NOEL ÷ Exposure
 = 0.1 mg/kg/day ÷ 0.014 mg/kg/day
 MOE = 7.14